

Childhood Education

THE MAGAZINE FOR TEACHERS OF YOUNG CHILDREN

FRANCES MAYFARTH, Editor

Published for the purpose of stimulating thinking rather than advocating fixed practice.

Volume XV

Number 6

Next Month—

■ "Developing Art Abilities," the seventh theme for this year's issues, will be presented by Margaret Mathias who has prepared an article on the fine arts; by Lillian Mohr Fox whose article on creative music contains some delightful melodies created by the children; by Eva Gildea and Ellen Driscoll on "Creative Writing and Child Development" and Louisa Lawton on "Industrial Arts and Young Children."

■ Lucile Emerson of the University of Texas has prepared an article on creative rhythms and Margaret C. Prall, assistant professor of music, Mills College, an article on teaching music to children. An altogether delightful issue, prepared by persons whose work is outstanding.—*The Editor.*

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Courtesy Etta Chapin, Port Chester, N.Y.

The kindergartners visit the farm to see at first-hand just what goes on.

The locomotive couldn't be brought to school, but the children could visit the shops.



Courtesy Seaboard Air Line Railway

Two Interest High Points

Editorial Comment

Evaluation

WORKERS in modern schools, especially those active in providing a more satisfying education for young children, are frequently considered as hostile to scientific measurement. This is, of course, not the case. It is not true science in education to which these workers object, but the misuse of science. They are rightly concerned that certain measurement techniques with a limited application shall not interfere with establishing an educational philosophy and procedure designed to insure wholesome growth and development of children in modern society.

Test-makers from Binet's time down have warned against the too literal and mechanistic use of methods of measuring so-called "intelligence" and "achievement." Nevertheless, both our school administration and our preparation of teachers in the United States have in recent years been unduly influenced by a narrow conception of measurement and a correspondingly restricted view of education. There is increasing realization everywhere that education in our time will have to be more than the intellectualistic program characteristic of American schools until very recently. School administrators should not be blamed, probably, for having accepted too completely the measurement materials of the 1915-1930 period, but they should be helped toward understanding the present situation, particularly the constructive opportunity to utilize measurement for broader purposes than those of the conventional school.

EVALUATION, as the articles in this issue by Dr. Taba and others clearly show, is an attempt on the part of persons skilled in measurement techniques and with a modern philosophy of education to make the widest possible use of any instruments that can be devised to discover the needs and possibilities of children and youth, and to measure the effects of the process. Instead of taking a conventional school program for granted, as the earlier measurement group tended to do, those who are working in evaluation at the present time begin by asking the school or school system to state its objectives. With these objectives carefully formulated and understood, it then becomes possible to employ scientific measurement to evaluate the results. Unlike measurement as used in certain types of school administration, evaluation becomes the tool by which we can know how well we are succeeding in meeting the all-round needs—emotional, aesthetic, intellectual—of the individual human beings for whom the educational enterprise really exists. In this sense evaluation is one of the most promising efforts in education today.—*W. Carson Ryan*.

Education for Living

WE CONTINUE to repeat that education is for living, for happy, worthwhile living; that education is to help us attain the good life. Man, considered philosophically, is so helpless and awkward an animal that he has to be educated in order to live fully and beautifully and happily. Or to put it another way: Man is a creature so full of potentialities that unless he is shown by his educators—experiences, people and things—what potentialities he should develop and what to leave undeveloped, he does not really live; he is just a bundle of confused strivings, incapable of sustained achievement. Education aims to make man achieve something, primarily for the sake of his own happiness, and secondarily for the sake of transmitting whatever culture he has inherited.

So that man may live fully, the schools must search for the types of experiences that will make probable his best development and ultimately his happiness. In *The Purposes of Education in American Democracy*, happiness and its attainment are described thus: "Somehow, the learner must come to know what constitutes real happiness, must learn where it is most likely to be found, must desire to acquire it for himself and others, and must master the way of claiming it. For what is the use of establishing a democracy guaranteeing the right to pursue happiness, and of developing through processes of education the initiative to search for it and the ability to choose the right path, if we leave the person unable to recognize happiness when he finds it, or to interpret its deeper meaning if he recognizes it?"

IF EDUCATION is for the sake of helping man transmit whatever culture he has inherited, surely time must be taken to evaluate that culture. Will today's culture present more than a struggle for economic existence on the part of great masses of our citizens? If education is for living, then what of the quality of that living? Before we can have a culture we must have a civilization. Before we can have a civilization we must guarantee to every child who is born the four fundamentals of decent living: adequate food, clothing, shelter, and a chance to work. Then, perhaps, we can establish a culture worth inheriting that will make as something more than a crowd of schoolboys, chattering about democracy and the advance of education—F. M. M.



LET this Corporation make the city of my birth great in the amenities of life. . . . Let painting, sculpture, music and arts grow under its auspices and make the dwellings of the citizens abodes of joy. Let this city wipe out its blot of illiteracy with all its dirt and uncleanliness. . . . Let her citizens have strength of body and energy of mind, and be inspired with civic spirit born of joy.—Rabindranath Tagore

The Functions of Evaluation

HILDA TABA

EVALUATION has several important functions in educational procedure. These functions are receiving much attention today and many questions are asked concerning them. We shall discuss four of these functions and answer some of these questions.

To Help Provide More Intelligent Guidance of Teaching and of Learning. It is a commonly accepted fact that learning is most effective when it is directed according to the needs, difficulties, and accomplishments of children. We also have come to believe that teaching should bring about a wider range of desirable outcomes than those purely academic in nature.

Most teachers today think that, besides the mastery of information and skills, their teaching should promote the growth of such aspects of personality as interests, more desirable social attitudes, greater emotional maturity, better methods and habits of working, critical thinking, and so on. These teachers also believe that these qualities and abilities are not to be developed by some special isolated processes set up for that purpose, but that they should be developed through the day-by-day living in the classroom, for which the teachers are responsible. The recent emphasis on guidance as an integral part of classroom teaching bears witness to this trend in education.

In order that these kinds of development may be provided for properly and may be guided intelligently, it is necessary that teachers know, first, what the needs, difficulties, and problems of children are; and, secondly, how effectively they are helping children meet them. A carefully designed program of appraisal would provide this evidence.

The need for evaluating the outcomes of teaching is especially crucial in view of the fact that there are great individual differ-

Miss Taba, a member of the evaluation staff of the Progressive Education Association and assistant professor of education at the University of Chicago, outlines the purposes of evaluation, discusses what should be evaluated, and describes how to develop an adequate program of evaluation.

ences among children in the degree to which they achieve different kinds of objectives and in the patterns in which that achievement may take place. Hence no pre-determined formula of curriculum or method of teaching is apt to be helpful.

To guide effectively the learning for all children the teacher needs to know something about the peculiar problems, difficulties, and ways of achieving of each child. A method which is successful in broadening the interests of some children may not be effective with others. The problems and tasks which challenge the thinking of one group may leave another untouched. While one child may be most in need of discipline in thinking, the next one may need opportunity for creative individual expression for his fullest and best development. To guide all children effectively, the teacher needs to diagnose each individual's needs and to appraise his progress in achieving a whole range of desirable objectives.

To Develop More Effective Curricula and Educative Experiences. In recent years much experimentation has been done with educational materials and methods, and with the content of curriculum and ways of organizing it. Most of these experiments are based on the assumption, sometimes rather vague, that they will produce some desirable series of changes in children. In that sense they are

hypotheses and need to be tested. Teachers need to know as definitely as possible what it is they are trying to develop through various types of instruction and to find out whether or not they are accomplishing what they set out to accomplish.

Most curricula are likely to be successful in producing certain changes in children yet fail in some other important respects. Curriculum experimenters too often are apt to change from one program to another without definite evidence regarding the possible outcomes. Throughout all the feverish experimentation with curriculum during recent years evidence as to the value of different programs for various purposes and with various children is sadly lacking. Disputes about the effectiveness of an activity curriculum versus one emphasizing academic subject matter, the quarrels about neglecting fundamental skills in the emphasis on socialization and child interests are apt to be settled not on proven evidence of what actually happens to children, but according to which side can speak most convincingly.

To Secure More Intelligent and Effective Cooperation with Parents and Community. It is common knowledge that a large part of the education of young children occurs outside the school walls, in the home and in the community. In many schools a serious effort is made to develop a cooperative plan among the various agencies affecting the growth of children. This cooperation can be made effective only when it is directed at real points of need and when it is guided by accurate knowledge of what children need for their development and what happens to them as a result of various types of experiences.

Neither parents nor the community are easily convinced by mere general arguments about what Johnny or Mary may need for their maximum development, particularly if those needs diverge from the accepted pattern of achievement. Thus parents often get upset when their son or daughter does

not show what they consider to be a proper degree of achievement in spelling, arithmetic, or reading. This concern is not necessarily due to the fact that parents are not capable of appreciating the importance of such achievements as social adjustment, development of interests, desirable play habits, and skills, but mainly because it is easier for them to evaluate Johnny's progress in spelling or Mary's shortcomings with the multiplication tables. It is up to the teachers concerned with the development of the whole personality to give parents equally convincing evidence of progress or lack of it in these other important respects, if they want parent or community cooperation for this wider program of educating children.

To Provide an Adequate and Objective Basis for Reporting Progress. Last, and not necessarily the least important function of a careful appraisal, is that of providing an adequate and objective basis for grading and reporting the progress of children. Our present system of grading, whether in the form of marks or descriptive reports, is often narrow in scope and highly subjective. Only certain types of achievement are reported and, in many cases, these reports represent some one individual's judgment on rather meager evidence and are in that sense not objective.

At present children are most often graded only with respect to academic achievement and within that only on the basis of their ability to remember information. When other types of achievement such as effective work habits, effort, social adjustments, and interests are recorded and reported, the evidence is drawn from casual, infrequent, and unsystematic observation in the course of which a single dramatic feature may strongly influence the judgment of the respective teacher. Thus it is not uncommon that the child's ability to cooperate is judged by his willingness to cooperate with the teacher, to follow her instructions, and to bring in work on time. Effective work habits

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WHAT SHOULD WE EVALUATE?

At present there is a great discrepancy between the range of the desirable educational outcomes which teachers either say they are trying to develop or which they actually are developing, and what is being systematically appraised. This is due partly to the fact that some of the objectives now stressed represent attractive slogans only and the teachers do not know what kinds of mental and behavior processes are involved. Hence it is difficult for them to discover whether or not the children are achieving these objectives. Thus, if we do not know what kinds of behavior represent desirable social adjustment, if we do not know what the children of a certain age could be expected to do when they are socially adjusted, it would be difficult to appraise whether or not they are developing satisfactorily in this respect.

Again, this discrepancy is due to a tradition in education regarding the way in which these characteristics develop. Such characteristics as social attitudes, interests, and emotional adjustment are either thought of as by-products of the real business of education, hence not meriting real analysis, or else they are vested with mysterious qualities which defy objective analysis and are apt to be distorted and destroyed by it.

The creative expression of children is placed in such a category. Not a few teachers have the feeling that if they attempted a careful analysis of what transpires when the children are engaged in a creative process, then that process would cease to be, in its true sense. The attempts to analyze many other behavior processes evoke the same kind of response in teachers. They are treated as mysterious products the judgment about which better be left to intuitive insight and not be subjected to an intellectual analysis.

The misconception of what constitutes evaluation often adds to the reluctance in accepting it as a legitimate part of teaching. Evaluation is often identified with measurement, and that in turn with standardized tests of the paper-and-pencil variety. Thus teachers are led to believe that the only way of obtaining objective evidence is through paper-and-pencil tests of a certain type. Other means and methods of collecting valid and objective evidence of child growth have not been sufficiently explored. Since the methods of current standardized information and intelligence tests do not seem to do justice to the appraisal of the so-called intangibles, an impression is created that these qualities are incapable of objective appraisal.

A further difficulty is introduced by the fact that evaluation is thought of as an appraisal of an end product, not as a means of diagnosing difficulties and successes with the mental and emotional processes in achieving that end product. Appraisal has often taken place at the end of teaching, not before. Hence the results have not been as helpful to teachers as they might be. This fact has discouraged them from giving their time and thought to systematic appraisal.

All this does not absolve teachers of the responsibility for finding ways and means of collecting as valid and as objective evidence as is possible regarding all of the significant types of achievement. Many teachers have taken at least the first step toward a more satisfactory program by formulating their objectives. These statements of the significant objectives vary markedly from school to school. But this variation is mostly in the emphasis and in the form of the statement. An analysis of the basic types of behavior involved usually shows that these objectives fall in some such large areas as are discussed below:

Functional Information. Increasingly, teachers are more concerned with the ability

of children to use the facts which they learn rather than with the mere recall of information. Often, however, teachers assume that the possession of information is also an indication of an ability to use it. Numerous psychological studies have been conducted to show that this is not the case. For example, children may know all about the processes of parliamentary procedure yet fail to see what relevance it may have in conducting their own meetings. They may know a good many scientific principles and facts, but be incapable of relating that knowledge to their everyday lives. Thus a direct appraisal of the ability and inclination to use information is needed.

Critical Thinking. This is a rather broad area. It includes behavior ranging from awareness of problems and the ability and inclination to seek solutions to them, to the specific abilities necessary for a rational and scientific treatment of all kinds of facts and ideas.

Teachers working in this area have indicated three major aspects of critical thinking: (1) the ability to draw reasonable inference from facts; (2) the ability to apply known facts and generalizations to new situations and problems, and (3) the ability to evaluate critically the arguments, ideas, and conclusions set forth by other people.

1. *The ability to draw reasonable inference from facts.* While the old type of teaching usually presented children with ready-made conclusions, recent emphasis is on helping them to draw their own conclusions from facts of appropriate level of difficulty to them. The complexity of facts and of their relationships which children are expected to handle and the kinds of presentations which they are expected to understand vary according to age and maturity level.

But on each level teachers are asking themselves such questions as the following: Do the children grow in their ability to get accurately the meaning of facts presented? Do they see as many different relationships between different sets of facts as is appropriate for their level of development? To what degree do they master the techniques and manipulations necessary

to get the full import of these facts? Do they manifest an inclination to overgeneralize, to go beyond the facts, and to what degree are they able to see the limitations within which reasonable conclusions may be drawn?

2. *The ability to apply known facts and generalizations to new situations and problems.* No matter on what level thinking takes place or with what problems it is concerned, its fruitfulness depends greatly on the adequacy of this deductive process. Particularly it is important that children develop an ability and an inclination to apply what they learn to the problems which they meet in their daily life.

In this connection teachers want to know what kinds of generalization children know and understand, to what range and variety of problems they can apply these generalizations and facts. Are the principles and facts which children apply relevant to the situation, or are they carried away by wishful thinking, emotional bias, or irrelevant considerations? Do they see all of the important principles and facts which may be applicable to the situation? Do they show a desirable degree of consistency in applying facts and principles? These considerations are of especial importance in connection with problems which are affected by personal viewpoints and opinions, and most problems dealing with human and social relations are of such nature.

3. *The ability to evaluate critically the arguments, ideas, and conclusions set forth by other people.* Adolescents and adults need to exercise such critical evaluation in a world as beset as is ours with all types of propaganda. Children similarly need to be able to judge each other's ideas and those they read in books or meet in other ways, in terms of whether or not the evidence used for arriving at conclusions is adequate, whether the argument itself is reasonable, whether or not all important considerations have been taken into account. This kind of evaluation is as important in school work as it is in children's daily lives; and as important in the case of young children as it is in the case of adults and adolescents.

Interests. One of the major tenets on which modern education is based is that it should meet children's interests and in turn aid in expanding and deepening these interests. Interests are an important concern not only because they have a bearing on effec-

tive learning, but because of their contribution to fullness and richness of daily life. Consequently, teachers need to know what interests children of various age levels have, what kinds of developments they undergo, how, and in which directions they may be stimulated most effectively.

Teachers may emphasize various kinds of interests. Thus interest in reading a variety of books; interest in other people, countries, and times; interest in various arts and hobbies are the most frequently mentioned. Similarly not all groups of children and not all individuals need or should develop the same patterns of interests. But all teachers are concerned that children's interests grow in range and significance; that children develop some relatively permanent and fruitful interests. They think it important that children's wishes be within the limits of their capacities and that they learn to derive satisfaction from a reasonable variety of activities performed in the daily routine in living.

Work Habits and Study Skills. With the growth of the emphasis on independence and initiative in learning activities, teachers' ideas of what constitutes effective work habits and skills have expanded. Thus besides such habits and attitudes as promptness in finishing tasks, the ability to use time to the best advantage, and economical methods of study, even teachers of younger children are developing activities which call for resourcefulness in finding information from a variety of books and other printed sources, from other people, and through observation. Fairly early children are expected to show a reasonable ability to discriminate between significant kinds of information and facts or ideas of no importance to the given problem or for a given purpose. In many schools the ability to plan a procedure for attacking problems and tasks is considered an important skill to develop and most schools emphasize the skills connected with an or-

derly and effective presentation of ideas and materials.

Attitudes. Emotional reactions are an important part of personality development. For long, teachers have been concerned with children's attitudes toward each other, toward school, and toward such aspects of its routine as discipline, order, and treatment of its property. Most schools today are concerned also with students' attitudes toward other people, their tolerance of differences in manners and personality characteristics, their concern about other people's problems and welfare, and a sympathetic respect for all kinds of human beings and for other beliefs, congenial to a democratic way of living and working together.

HOW TO DEVELOP AN ADEQUATE PROGRAM OF EVALUATION

By Formulating, Listing, and Grouping Objectives. One of the major difficulties with the development of a program of evaluation is that what there is of it is often removed from the major concerns of teachers. In order to remove this difficulty, a program of appraisal should start with a careful formulation and listing of objectives by individual teachers, or by groups of teachers within one school, or by groups of schools. This formulation and listing is important for the purpose of developing instruments of appraisal which give the kinds of evidence that are significant to teachers and which bring results which they can appreciate and use. This formulation is also important for the purpose of assuring that the total program of appraisal covers all the significant types of child development and is in that sense comprehensive enough. This process also points out to all participating teachers the values important to the "development of the whole personality," and thus promotes a cooperative attack for their development.

The statements of objectives thus secured are often far from usable. They may repre-

sent a mass of detail with no discernible direction or emphasis. They may be so unwieldy and chaotic that it is difficult to appraise the relative significance of the objectives listed. In this case a classification or grouping of objectives may be necessary so that similar kinds of behavior fall together. Thus teachers of social studies may indicate that they want their students to read about current events, the physical education teachers may want to develop a liking for certain kinds of physical activity, still others would want the children to develop curiosity about people and places. All of these essentially represent different kinds of interests and may be grouped together as such.

This kind of grouping helps in many respects. For one thing the program of appraisal becomes more manageable. Evidence on different kinds of specific behavior can be secured by the same instrument. A grouping also indicates which of the objectives are common throughout the school and hence the concern of all teachers.

Frequently objectives are stated too vaguely and thus have different meaning for different people. In this case a further classification is needed to see precisely what behavior processes are involved so that teachers may recognize and observe them. For instance, unless it is quite clearly stated what behavior is involved in an "imaginative approach to problems," no clear and commonly accepted appraisal of child growth towards this objective is possible.

Again, objectives may be stated in such broad terms that a clearer and more specific analysis is needed before adequate instruments can be developed. The analysis of critical thinking (on page 248) represents an example of this process. This large objective had to be broken down into several less complex units before teachers were sure what they were appraising.

Still more often objectives are stated in terms of the duties of the school and the teachers, not in terms of changes expected

in students. "To give a variety of experience to students" is an example of this type. Obviously "a variety of experience" is something teachers need to provide in order to produce some kind of outcome with children.

By Collecting Objective Data. Another important task in the development of an evaluation program is to explore the situations in which children have an opportunity to demonstrate the behavior under appraisal, and to determine the conditions under which that expression can take place naturally. Interests may be expressed in the choices of activities, but these choices are an expression of real interests only when there is an opportunity for free choice and several possibilities from which to choose. Critical thinking can be demonstrated in situations in which students have an opportunity to attack problems that are meaningful and significant as well as new to them, and that call for independent and original thought on their part. Cooperation or lack of it shows up under conditions where children can work together on common problems requiring cooperative attack.

Besides paper-and-pencil tests there are many informal methods for collecting objective data. Teachers can observe and record certain kinds of classroom behavior, such as questions asked in discussion and the significant replies. Certain important behavior incidents can be recorded in anecdotal records. Most schools keep records of activities in which the pupils participate. Children can be induced to keep diaries of their experiences in and out of school, and of their reactions to them. Analysis of children's writing, of their art work and other products gives useful information.

Some commonly used classroom procedures can be so managed as to be useful for evaluation as well as for teaching purposes. Thus it is possible to formulate some assignments for writing so that children will reveal their personal reactions without having to write "the same things." Suggestions

from the class on how to go about finding certain kinds of information, or what to do about some perplexing problems of working together have a definite diagnostic value if recorded and collected over a period of time.

But all of these methods have difficulties and certain precautions must be taken if they are to be useful. One of these precautions is that teachers should be quite clear as to the kind of behavior they are looking for. They should also agree on the specifications under which the observation, or any other form of appraisal for that matter, should take place. Thus, if interests were the behavior under appraisal, teachers should agree on what kinds of interests they are looking for and what qualities they regard as desirable as to range, variety, intensity, significance, and permanence. They should also have some idea of what type of interests or what degree of qualities listed they may expect of children of certain age and under certain curriculum experiences.

Another difficulty is connected with personal bias in appraisal. The precautions discussed above eliminate some of this bias, but another source of personal bias is in the form of the record itself. In the case of observational and anecdotal records it is not uncommon for teachers to write down their own interpretation and evaluation of behavior incidents, rather than to describe the behavior itself. Thus a teacher may report that Bobby showed a splendid spirit of cooperation on the play ground but fail to describe the actual behavior which led her to that conclusion. It is impossible for

other teachers to appraise such a record.

The third difficulty is that of the time required for such type of appraisal. Without concentrating on manageable areas of significant behavior and without a definite cooperation of all teachers concerned, these materials are apt to be too scattered to afford a meaningful picture of any one individual.

It is for this reason that teachers need to explore ways and means of formalizing some of the evaluation procedures so that more information on a greater number of children can be secured with minimum effort and time. The kinds of data already commonly available concerning children can be put to better use, once teachers and schools are clear about the objectives. At present these records are often scattered; they are not summarized and interpreted so that helpful information is available. Often they are not even available for the teachers, and they should be.

The evaluation procedures outlined in the preceding paragraphs have been developed and used by the teachers in the thirty schools participating in the Eight-Year Study of the Progressive Education Association. This program of appraisal has proved practicable for teachers in secondary schools, and the same principles apply to the development of evaluation procedures in the elementary and primary schools. When conducted as a cooperative undertaking by groups of teachers, a comprehensive evaluation program can be developed which is appropriate to that level and which will make an important contribution to the effectiveness of teaching.



THE DEMOCRATIC theory of social life presupposes that every child and every other member of society must have at least some degree of capacity for improvement and growth. That capacity, however large or small it may be for any given individual, is the fulcrum for the lifting power of democracy.—*William G. Carr, in National Parent-Teacher, January, 1939.*

Appraisal of Tests and Measures for Young Children

J. WAYNE WRIGHTSTONE

GUIDING, analyzing, and studying growth and development of young children have been facilitated by continuous improvement and application of tests, measures, and observations of behavior. Measures for young children differ from the usual pencil-and-paper tests so commonly used above the primary grades because young children are not adept in reading or expressing their attitudes, interests, concepts, and knowledge in written symbols. The most successful psychological measures applied to the young child are the interview, rating scale, judgment scales of child products, controlled-observation techniques, anecdotal records, stenographic reports, and photographic evidence.

These measures, however, are difficult to improve so that they can be proved valid, reliable, objective and practical of administration in typical school situations. On the other hand, as these techniques of measurement are improved and applied successfully to young children, they offer suggestions for the measurement of the so-called "intangibles" in the growth of older children.

From the early period of measurement, about 1912, when Terman introduced his revision of the Binet-Simon Intelligence Scale, many experiments in measurement have been conducted to obtain indexes of the intellectual capacity and abilities of young children. In comparatively recent years measures of physical and motor skills, capacities and abilities have been developed. Even more recently measures of personal and social adaptability have been developed for nursery school and primary school children.

Editor's Note: Mr. Wrightstone's study, *Appraisal of Newer Elementary School Practices*, is reviewed on page 283 of this issue.

What are today's trends in tests and measurements for young children? Wherein do improvements need to be made to conform to our increasing knowledge and understanding of child growth? Mr. Wrightstone is associate director of the staff for Evaluation of School Broadcasts, Ohio State University.

MEASURING INTELLECTUAL FACTORS

Academic Aptitude. Growth of academic capacities is usually estimated from achievement involving the ability to manipulate written symbols such as words, numbers, pictures, graphs, maps and the like. The index of general ability to manipulate abstract symbols has been called the I.Q., or intelligence quotient. In ascertaining the I.Q., or generalized index of academic aptitude, the tests most commonly used have been patterned after Terman's revision of the Binet-Simon test. As a matter of fact, in his latest revision of this test Terman¹ probably holds front rank for the development of the most practical and widely used measure of academic aptitude of young children. Similar widely used intelligence tests are the Detroit First Grade Test,² the Detroit Kindergarten Test,³ and the Merrill-Palmer Scale.⁴ Non-verbal intelligence tests, based upon graphic methods of identification and interpretation, are illustrated by the Pintner-Cunningham⁵ tests. Most intelligence tests measure a composite of abilities needed to manipulate abstract symbols and, therefore, are valuable not so much in judging social

¹ Terman, Lewis M., and Merrill, Maud. *Measuring Intelligence*. Boston: Houghton Mifflin Company, 1937. 461 p.

² Published forms or manuals by World Book Company, Yonkers, New York.

competence or other attributes as in estimating the child's adaptation to a curriculum of words, numbers, and pictures.

Criticisms of the adequacy with which available intelligence tests measure the component, or primary, mental abilities have led L. L. Thurstone to conduct studies of primary mental abilities. In these studies Thurstone⁵ has isolated and interpreted seven primary factors which he enumerates as: the verbal factor, the number factor, the space factor, the memory factor, the perceptual factor, the word factor, and the inductive factor. For older children the implications of these findings are that each of these factors should be measured by a separate valid and reliable test or subtest of a battery designed to measure academic aptitude. The implications for tests of academic aptitude of young children may be similar to those for older children. These implications need to be tried and proved in actual school situations; they are too new and tentative to be accepted on faith.

A criticism of the use and interpretation of intelligence test results is that the psychological factors involved in most intelligence tests are influenced by certain environmental factors. Investigators⁶ at the Iowa University Child Welfare Station have reported changes in the I.Q. of children under varying environmental conditions such as the type of home, especially changes in guardianship, and preschool training. Their evidence shows that the I.Q. is not necessarily as constant as it is often assumed to be.

An analysis of the Stanford-Binet test shows that it is predominantly a memory test on its early levels. This indicates a relationship between simple retentivity and the more

general ability which is termed intelligence in young children. Driscoll⁷ investigated the usefulness of two preschool tests (Merrill-Palmer and Kuhlmann-Binet) for prognosis the future mental ability of children. In general the data show that the retests gave positive but not sufficiently high correlations to make confident prediction of a child's future status on the basis of tests given before four years of age.

Reading. Because reading is important as a tool in all subjects, many measures of the reading process have been constructed. Among the first measures to be applied were the eye-movement studies at the University of Chicago. Here photographs were made of the number of stops that the eye made per line, the number of regressions, the duration of fixation and the rhythm of the eye movement as well as the return sweep to the next line. A new method is available in the ophthalmograph,⁸ an expensive photographic device for recording eye movements. As the eyes move in reading, a bright bead of light reflected from the cornea is recorded on a moving film. Another instrument of practical use is the Betts telebinocular apparatus⁹ which is essentially a stereoscope that permits the measurement of visual acuity, astigmatism, eye muscle balance, and fusion when used with a standard series of slides involving pictures, charts and a series of paragraphs.

Among the first to construct pencil-and-paper tests to measure primary reading ability of words, sentences, and paragraphs was Gates in his tests of Comprehension of Words, Sentences and Paragraphs.¹⁰ Comprehension is measured by the child's draw-

⁵ Thurstone, L. L. *Primary Mental Abilities*. Chicago: University of Chicago Press, 1938. 121 p.

⁶ (a) Coffey, Hubert S., and Wellman, Beth L. "The Role of Cultural Status in Intelligence Changes of Preschool Children." *Journal of Experimental Education*, December, 1936, 5:191-202.

(b) Skeels, Harold M. "The Relation of the Foster Home Environment to the Mental Development of Children Placed in Infancy." *Child Development*, March, 1936, 7:1-5.

⁷ Driscoll, Gertrude Porter. *The Developmental Status of the Preschool Child as a Prognosis of Future Development*. Child Development Monographs, No. 13, New York: Teachers College, Columbia University, 1933. 111 p.

⁸ Manufactured by the American Optical Company, New York City.

⁹ Manufactured by the Keystone View Company, Meadville, Pennsylvania.

¹⁰ Published by Bureau of Publications, Teachers College, Columbia University, New York City.

ing a line from a word, sentence, or paragraph to the correct picture or pictorial illustration. For pupils above the first grade level in such test batteries as the Stanford,⁹ Metropolitan,¹⁰ Modern School,¹¹ and Progressive,¹² tests will be found which measure rate of reading and of comprehension. The latter is usually defined as the ability to give the main idea of a paragraph or to note details given in the paragraph.

Gray's standardized oral reading tests of paragraphs¹³ provide a measure of oral reading abilities from about first or second grade level through the grades.

Available reading tests have proved themselves valuable, but at their present stage of development they have tended to restrict a broader conception of what constitutes the reading process at the elementary level. Many of these tests have tended to reduce reading to a series of more or less discrete habits and skills ignoring their interrelationships as well as certain other components of a broader conception of the reading process, such as powers of interpreting, evaluating, and applying what is read.

Number. For the arithmetic abilities and skills, tests have been built to measure the ability to compute and the ability to solve problems. Such tests are included in the Metropolitan, Stanford, Modern School, and Progressive Achievement Test series previously mentioned. The general criticism of these tests is that they tend to measure only a narrow range of the skills and abilities which should be associated with a broader conception of arithmetic processes. In a recent report Morton and others¹⁴ of the National Council of Teachers of Mathematics

have pointed out the need for a broader conception of what constitutes number experiences of children. The implications of this broader conception for testing and measurement is apparent; namely, new tests and measures need to be devised so that the teacher may be able to appraise growth in these abilities and skills.

Language. To study the development of language in preschool children Fisher¹⁵ analyzed stenographic records of the language of seventy-two children, aged two to five years. Each child's language was recorded during a total period of nine hours in the nursery school. Williams and others¹⁶ studied the language development of 285 children between the ages of one and eighty months, and devised a tentative scale of language achievement covering these ages.

Art. To measure some aspects of art forms Bailey¹⁷ took photographs of block constructions made by fifty-four two- to five-year-old children and had the constructions rated by adults. The results showed that ability to plan and carry out a design increases with age and that with age the designs tend to become more symmetrical and the blocks placed more carefully.

MEASURING PHYSICAL FACTORS

Various and sundry methods are used to measure physical growth of children. These range from the use of height and weight norms and indexes to tests of eye-hand coordination, such as the finger tapping, stylus tapping, needle threading, and the walking path tests. Calipers are used to obtain accurate anthropometric data on the size of the head, hands, etc. Certain tests of posture, particularly the silhouette method, are being

⁹ Published by the World Book Company, Yonkers, New York.

¹⁰ Published by the Bureau of Publications, Teachers College, Columbia University, New York City.

¹¹ Published by the Southern California Book Depository, Los Angeles, California.

¹² Published by Public School Publishing Company, Bloomington, Illinois.

¹³ Morton, R. L. and Committee. "A Basic Viewpoint on Arithmetic." *Curriculum Journal*, November, 1938, 9:299-305.

¹⁴ Fisher, Mary Shattuck. *Language Patterns of Preschool Children*. Child Development Monographs, No. 15. New York: Teachers College, Columbia University, 1934. 88 p.

¹⁵ Williams, Harold M., McFarland, Mary L.; and Little, Marguerite F. *Development of Language and Vocabulary in Young Children*. Studies in Child Welfare, Vol. 13, No. 2. Iowa City: University of Iowa, 1937. 94 p.

¹⁶ Bailey, Marjory W. "A Scale of Block Constructions for Young Children." *Child Development*, June, 1933, 4:121-39.

used. In sports, time or distance is used in running, jumping and the like to obtain an index of certain large muscle skills. Many of these measures, however, are open to varying interpretations and a great deal of caution needs to be used not only in taking measurements but in interpreting them.

The emergence and growth of specific motor patterns of the same individuals at successive ages have been studied by direct observation, supplemented by the analysis of cinema records. Gesell and others¹⁷ presented in normative gradations the sequential response of infants to specific situations from the earliest manifestations to the established patterns. Bayley has presented, also, the results of a seriatim study of a group of children retested on the California Infant Scale of Motor Development¹⁸ from birth through thirty-six months of age. The scale contains seventy-six items related to motor development.

MEASURING PERSONAL-SOCIAL ADAPTABILITY

In addition to the intellectual and physical skills and abilities are the personal-social, or so-called character and personality factors which have recently received emphasis in measurement. Since the very young children can not respond to pencil-and-paper tests, other techniques such as controlled observations, rating scales, and interviews have been used widely for the preschool and primary school child. Children above the fourth grade, however, have frequently been asked to fill out self descriptive questionnaires such as the Woodworth-Mathews Personal Data Sheet.¹⁹ Various tests for character traits were developed in the Hartshorn and May Character Education Inquiry, but these tests have not been widely used.

¹⁷ Gesell, Arnold L. and others. *The Psychology of Early Growth*. New York: Macmillan Company, 1938. 290 p.

¹⁸ Bayley, Nancy. *The Development of Motor Abilities During the First Three Years*. Society for Research in Child Development Monograph No. 1, 1935, 26 p.

¹⁹ Published by C. H. Stoelting Company, Chicago.

Controlled-Observation Techniques. For children below fourth grade the most widely used technique in measurement has been the so-called "time-sampling" or controlled-observation technique. In this technique the behavior to be measured is defined in terms of overt and observable acts or activities and specially trained observers record the occurrence of the defined acts during a specified time interval over a period of days, weeks or months. Thus it is possible to obtain an index of an individual's behavior in normal school situations. Pistor,²⁰ for example, measured such qualities as initiative, cooperation, work spirit, and dependability. Olson and Cunningham²¹ have compiled an extensive bibliography of the observational techniques constructed to measure many personal and social qualities in young children.

Closely allied with this technique is the method of anecdotal records of behavior journals. The values of the cumulative records of incidents and behavior journals have been described by Charters,²² Olson,²³ and Randall.²⁴ The shortcomings of observational methods are that they are time-consuming and not very practical for the usual classroom purposes. The indexes obtained are usually not comparable from class to class, and definitions of various traits or qualities may vary among different observers.

Rating Scales. Of more practical value than the time sampling method or the behavior journal method of evaluating behaviors is the rating scale. The Haggerty-Olson-Wickman Behavior Rating Scale²⁵ illustrates

²⁰ Pistor, Frederick. "Evaluating Newer School Practices by the Observational Method." *National Elementary Principal*, July, 1937, 16:377-389.

²¹ Olson, Willard C. and Cunningham, Elizabeth Mechem. "Time-Sampling Techniques." *Child Development*, March, 1934, 5:41-58.

²² Charters, W. W. "A Character Development Study." *Personnel Journal*, August, 1933, 12:119-23.

²³ Olson, Willard C. *The Behavior Journal*. Manual of Directions and Form (Revised). Ann Arbor, Michigan: University Elementary School, University of Michigan, 1935.

²⁴ Randall, John A. "The Anecdotal Behavior Journal." *Progressive Education*, January, 1936, 13:21-26.

²⁵ Published by the World Book Company, Yonkers, New York.

one of the best of the rating scales for young children. Recent rating scales have been devised by Baker and Traphagen, Van Alstyne, Doll, and Joel. For example, Baker and Traphagen²⁶ devised a method of scoring 66 diagnostic items having to do with a variety of environmental, historical, and present status material about children. The items and total score may be related to the diagnosis of delinquency. Van Alstyne²⁷ devised a scale for rating social behavior and attitudes from the nursery school through the sixth grade. It consists of thirteen situations and their response levels, which permit ratings on cooperation, social consciousness, emotional adjustment, leadership, and responsibility. Doll²⁸ evolved a Genetic Scale for Social Maturity which consists of 117 items. The age range is from infancy through adult life. Ten familiar nursery school situations were reproduced and scaled by Joel²⁹ to rate behavior maturity in nursery school children.

Interviews. Closely allied with the rating scale is the use of interviews in the study of children. Perhaps one of the most interesting of the interview techniques for young children is that by Appel³⁰ who used the drawings of children as a basis for interviews in studying personality difficulties and patterns. As a sort of controlled interview the Rorschach test is being used rather widely. In this procedure the subject is asked to tell what he sees in each of a number of paint- or ink-bLOTS in variegated colors, and his responses are interpreted in terms of what their deviations from norms—derived from wide

²⁶ Baker, Harry J. and Traphagen, Virginia. *Diagnosis and Treatment of Behavior-Problem Children*. New York: Macmillan Company, 1935. 393 p.

²⁷ Van Alstyne, Dorothy. "A New Scale for Rating School Behavior and Attitudes in the Elementary School." *Journal of Educational Psychology*, December, 1936, 27:677-93.

²⁸ Doll, Edgar A. "A Genetic Scale of Social Maturity." *American Journal of Orthopsychiatry*, April, 1935, 5:180-90.

²⁹ Joel, Walther. "A Behavior Maturity Rating Scale for Nursery School Children (Abstract)." *Psychological Bulletin*, October, 1935, 32:558.

³⁰ Appel, Kenneth E. "Drawings by Children as Aids to Personality Studies." *American Journal of Orthopsychiatry*, January, 1931, 1:129-144.

experimental use—reveal about the pattern of the individual's personality. The process affords data which is often significant, especially as it is used in connection with supplementary information.

PROGNOSIS OF TESTS AND MEASURES FOR YOUNG CHILDREN

What are some of the best guesses about current and future trends in tests and measures for young children? It seems reasonable to assume that some of the methods and techniques now employed will require years of experimental use and refinement before they can be recommended for wide use. All of the methods and techniques of measurement, however, offer a fertile field of experimentation to the imaginative teacher or educator.

To the present observer the following trends seem most fruitful and likely to contribute to the knowledge and understanding of the growth and progress of children:

(1) In measuring academic aptitude it is predicted that tests and measures will be constructed to estimate as validly and reliably as possible each of the major component mental abilities which psychological research indicates comprise general intelligence.

(2) In measuring reading abilities and skills it is predicted that (a) instruments using photographic and stereoscopic observation of eye-movements will be further refined and improved; (b) newer and more comprehensive paper-and-pencil tests will be constructed to measure such powers in reading as interpreting, evaluating and applying what is read; and (c) the interview technique described by J. C. Dewey³¹ will be improved to measure broader aspects of vocabulary and comprehension in reading.

(3) In measuring number experiences or arithmetic abilities and skills newer and more comprehensive tests probably will be constructed to measure quantitative thinking

³¹ Dewey, J. C. "A Technique for Investigating Reading Comprehension." *School and Society*, March 3, 1934, 39:276.

and the sociological meanings and relationships of numbers.

(4) In measuring language abilities and skills it is predicted that stenographic records and methods will be used more widely and, in addition, that recordings by phonographic means of actual samples of children's oral language will be employed. Scales for judging children's growth in written work will be judged by scaling samples of their creative writing.

(5) In evaluating art work photography of certain products will come to play an important part in measuring art skills. Other products will be scaled and evaluated on such criteria as originality of theme, design and modes of expression.

(6) In measuring physical and motor development performance tests and observational scales such as those devised by Gesell and Bayley will be improved and extended.

(7) In measuring personal social adaptability new and improved controlled observation techniques, anecdotal records, rating scales and interviews will be devised and applied to measure child growth and progress.

(8) New and better methods for synthesizing data from tests and measures and interpreting results of measures will be devised. Any program of measurement or evaluation which is carried on without a regard for a planned system of records and reports is poorly conceived. Guidance of children in progressive schools demands a cumulative record for each child from kindergarten through grade twelve. This developmental history should include such records as school achievement, psychological tests, social background and experience, personality patterns, or adaptability. Such records have been available in certain forms in the past but newer and more effective forms for records and reports must and should be devised to in-

corporate the findings through newer tests and measures.

A newer trend away from the traditional records and reports toward a more inclusive record of pupil activities is emerging in some experimental schools. Some of these trends are well summarized by Mrs. Zyve³² who presents several major theses to the effect that (1) the recording system of any school must be unique and fitted to that school's purposes and objectives; (2) activities for the development of human meanings and values are predominant matters for record; (3) children grow through successive experiences, hence, the need exists for a continuous record of such experiences; (4) records today include those of the child's own making as well as teacher records; (5) the entire basis upon which a child's success is measured is changed from the number of facts remembered to the quality of his attitudes and social activities; and (6) the usual report to parents is supplemented by individual conferences or descriptive reports.

A cursory appraisal of tests and measures for young children shows that many of the measures are now in experimental stages of development; that they should be revised and reconstructed continuously so that they will measure better the functional behavior which is considered important by teachers and parents. New instruments and techniques should be devised for new areas and objectives of child growth. As these emerge in the newer practices of schools, a large and only slightly explored field of measurement is open to imaginative, informed, and inventive students of education. New and more inclusive measures which conform with new and more inclusive theories of child growth must be evolved.

³² Zyve, Claire T. "Recording the Changing Life of the School," *Progressive Education*, December, 1936, 13:621-631.

An Evaluation of "Units of Work"

RUTH STREITZ

FOR a process that must of necessity evolve slowly, education in this country is characterized by an impetuousness that is almost adolescent in its lack of stability. Any new idea or slightly reconstructed procedure is seized upon and immediately put into execution before it can be checked and evaluated through adequate study and thought. This enthusiasm for the immediate execution of an idea has brought many good procedures into disrepute and has substantiated the critics' complaints that in the United States educators do not know what they believe for they no sooner inaugurate one plan than they discard it for another.

In addition to this impetuousness there is also great carelessness in the use of terms. It is not uncommon for members of our profession to discuss the same thing in such different words and phrases as to make it appear that they are using a new and unfamiliar language. So we have the terms "fusion," "core curriculum," "units," "activities," and "experiences" used interchangeably with resulting misunderstandings in the general field of education. It is obvious that there is great need for an exact and, at the same time, descriptive terminology which will convey meanings, interpret ideas, and clarify issues rather than add to the confusion which already exists.

WHAT IS A UNIT OF WORK?

The term "unit of work" has undergone so many changes in the process of acceptance and rejection that its real meaning is relatively obscure. To many it seems to be a mere catch phrase. To some it is a source of great annoyance because it implies reorganization of one's pedagogical outlook. To others it is just a harmless expression which is not worth quarreling about. For

What is a unit of work? What are some of the dangers which have grown out of the trend toward units? From what base line shall evaluations be made? Miss Streitz, professor of education, Ohio State University, places her emphasis upon the quality of experience, regardless of what it is called.

an increasing number, however, the term "unit of work" is being replaced by the words "experiences" or "unit of experience" which include the selection and organization of subject-matter materials meaningful to the learner, the procedures which provide deeper and more penetrating insight into problems of social value, and behavior which becomes more and more acceptable to the social group. Thus, the true meaning and interpretation of methods, materials, and resulting growth must be broadly interpreted, must become increasingly more significant, and must receive continued study and reflection.

ATTEMPTS AT STANDARDIZATION

Blind following of dictates, regardless of their sources, caused many teachers to buy ready-made units of work. The result was a mail-order business with the buyer having no idea as to the purpose and function of his purchases in relation to his particular group. It was just as easy to order a unit on "Where We Get Our Food" or "How Man Has Kept Records" as it is to order a can of peas or a can of pineapple by a number which indicates content. The "canned unit" robbed the teacher and the pupils of the fun and intellectual stimulation which comes from real discovery and shared enterprises.

Not only has the sale of "canned" units

been lucrative but some groups have controlled their content as well. Topics which might lead children to question certain political and economic practices prevalent in the adult world of today have been omitted: "unfairness to workers," "amassing fortunes at others' expense," "selling goods known to be inferior by taking advantage of others' ignorance," "extensive advertising of goods calling attention to certain supposed good qualities in order to obscure the harmful ones," "refusal to admit historical data that might lead children to question certain patriotic traditions," "consideration of minority groups with rights and privileges based not upon numbers or force but upon the right of every individual to order his own life within the social structure." The reasons for these omissions are too obvious to need elaboration.

Teachers' thinking has long been controlled by the textbook and the prescribed course of study. With the realization that experience is necessary to thinking has come liberation of the intellectual processes for some courageous individuals which to some powers-that-be is a dangerous sign. To keep the teachers, and through them the children, in a state of harmlessness certain desirable units are assigned to each grade level. So one finds "the farm," "Indians," "how books are made" appearing year after year, usually in the same grades, until they form a crystallized mass. By this manipulation teachers do not wander far afield; the groups throughout a city are kept together; children fit into the school curriculum no matter which school they attend and spend their time going over superficial aspects of learning instead of probing deeply into suitable, challenging, and often more childlike activities. The children, evidently, are intended for the school and not the school for the children.

Furthermore, there is the assumption that the "unit" is nothing but subject-matter-to-be-learned so why not assign it? The teach-

ers in such cases are often vague as to important educational values. They are more concerned with whether or not the farm products are to be made of clay or papier maché than whether or not the child is learning to think clearly or to cooperate in planning the work.

Too often the teacher does all the planning and organizing without giving the children a chance to help with their own learning. In considering a general area of investigation such as "What Was Happening in America During the Years of the Westward Movement," the work could be done cooperatively with the children doing the planning, choosing the books they will read, what activities they will illustrate and in what medium, and deciding how they will begin their investigations. For example, they might begin by inquiring how their own parents and grandparents lived. It is these responsibilities, these personal decisions, these creative enterprises which develop the child's powers. Even the value of subject matter itself is determined by the way in which the child builds it into his own appreciations and understandings of the life he is living today.

Another grave fault to be found in the slavish following of courses of study and textbooks is implied in the previous statements, namely, the standardization of thought and the limiting of ideas for both teachers and pupils. Neither group uses its full intelligence or creative imagination, neither sees possibilities in the immediate experiences to be found in the environment, neither finds richer experiences beckoning from unexplored areas. The very outlook in purely intellectual fields (not to mention the importance of the social aspects of living) is therefore limited to the few meager ideas suggested by such materials. Adventure and discovery for the learner are reduced to a minimum.

Lack of leadership and understanding of the real purposes of educational experiences

have resulted in the blind following of a pattern. Teachers have come to believe that certain materials belong to certain grades. In one school the upper grade teachers complained that the primary teachers took subject matter that did not belong to them!

This criticism has two implications. In the first place, many primary teachers do teach many things that could best serve the learner at later stages of his development, and second, there is the idea that subject matter is so limited in its scope that it will be exhausted before the learner reaches these later grades. Another group said that the primary teachers did all the interesting things and left nothing for the later years.

Such expressions indicate the woeful lack of understanding and the paucity of ideas of too many people who are supposedly guiding the thinking of children today. Why should the first grade be limited to a study of the farm, the second to Indians, the third to community helpers, the fourth to foods, the fifth to transportation, and the sixth to records? Are these the only worthwhile activities in which children should engage? Are these the only topics which can open new vistas to children who have all of life before them and about which they know so little? Rather, we need to ask: Are these experiences child-like? Do they provide opportunities for the child to plan and organize his ideas and materials? Will the experience enable him to cooperate and share with others? Will "the unit" provide for immediate experiences in the environment? This last point alone will do away with Indians and the Japanese as too remote, requiring reading rather than experiencing. Such units belong in later curricula.

THE QUALITY OF EXPERIENCES

For the Teacher: Before discussing the quality of the experiences necessary for child growth and development let us first consider the teachers' opportunities for

growing in thought and attitude, for the growth in children will be in direct proportion to the growth that takes place within their teacher. The following questions might be used as a basis for evaluating the quality of the experiences whereby teachers can grow:

How many teachers are so fortunate as to work with leaders who are real students of the educational process?

How many, instead, do their work under an "efficient" administrator who manages and manipulates so that the "system" seems to move forward but who finds little or no time for cooperative group thinking and who inwardly rejoices that the demands of his office require him to dictate certain procedures and policies?

How many "leaders" provide for group study, insure guidance, helpfulness, and encouragement to teachers who are struggling and searching for better ways of teaching?

How many educational conferences provide for the coming together of superintendents, principals, supervisors, curriculum experts, college professors, and classroom teachers to discuss their common problems on common ground?

How many of these have made sufficient study to know the evolution of present-day practices in education so that they are not misled or mistaken when they refer to different types of curricular organization?

How many still say they want units of work within the frame of departmental organization where the teacher of specialized subject matter now plans a unit or repeats one that was conducted last year?

How many refer to activities and projects but in actual practice intend that subject matter shall control and influence the entire undertaking?

How many realize that to accept the idea of *experience* involves both new or changing subject matter and also constitutes problems of organization and method?

How many recognize that guided experiences contribute to the best all-round growth of the child in a continuously changing, learning situation?

These questions, and many more, might well constitute a check list against which one's present educational outlook and criti-

cal thinking might be judged and evaluated.

For the Child: As educators concerned with the growing and developing child we must likewise be concerned with the quality of the experiences which are most likely to contribute to his growth. His needs and interests are not a sufficient guide upon which to base his experiences. In the first place, if the child were fully aware of his needs, he might conceivably elect not to be in school at all and, if one were to follow children's interests, one would indeed be following the vagaries of many humans with characteristic will-o'-the-wisp results. Many teachers seem to rely upon impulses or desires as sufficient purposes for learning. However, Dewey has pointed out repeatedly that neither of these can be considered as purposes because purpose is an end-view and involves foresight of consequences which in turn involves the operation of intelligence and demands observation of objective conditions and circumstances. Purpose definitely involves a plan and a method of action.

Thus, learning is not activity for the sake of activity nor activity leading to more and more activity on the same level but becomes instead *intelligent activity* proceeding to higher levels of organization of thought and action. Because there is this great opportunity to guide the choices and resulting activities in learning situations some teachers either impose their own purposes upon children or else sit by idly waiting for something to happen. Neither procedure is intelligent if one accepts the idea that desirable learnings involve group enterprise which is best attained through cooperation, and results in shared values.

Another point to keep in mind in the selection of materials of instruction for young children is that these materials must come within the range of the child's experience and must insure some measure of continuity. For example, six-year-olds might well consider such a topic as: "Going Far-

ther Than Our Feet Can Take Us"—roller skates, wagons, bicycles, trains, autos, airplanes. And let us not call it a study of transportation, either. "Transportation" is adult while "going farther" is child-like. "Roads and Where They Go," for example, calls for imagination and the on-going quality that should characterize true learning.

Thus, the alert teacher concerned with the best possible growing for herself and the boys and girls with whom she works will aid in the selection of those experiences which seem to offer greatest promise and potentiality in the way of new problems, new observations, new judgments, and new ways of relating the experiences thus gained to those that have preceded and upon which one may build those that are to come. Experiences in themselves are not important. It is the reflection upon the experience and the relatedness of the experience to other experiences that are significant. Learning does not take on dignity because of the past but it does become meaningful because it relates to the present and can relate to the future. Thus the whole learning process becomes connected and meaningful and therefore understood. In the final analysis, the child organizes his own thinking into what might be truthfully said to constitute the scientific method.

In conclusion, then, let us check to see whether or not the learning experiences have legitimate values: Do they involve the experimental method of study and procedure? Do they stimulate ideas which in turn require constant checking, testing, verification, and revision? Do they produce activities which lead to higher levels of thought and action? Do they give time for reflective thinking through which the entire learning process can be reviewed? Are judgment and discrimination employed in each situation and above all, are the significant features of the developing experiences recorded?

Experiments in Reorganizing the Primary School

A SYMPOSIUM

MANY requests have come to the individual information service of the Association for Childhood Education for descriptions of plans and experiments in reorganizing the primary grades, with grade lines and failures eliminated. Since little information was available, a questionnaire covering these requests was sent to the people listed below whose replies are reproduced here and summarized by Robert Hill Lane, assistant superintendent of schools, Los Angeles, California:

Welborn S. Dimmett¹
Superintendent of Schools
Forest Park, Illinois

Helen Hadley
Director of Kindergartens and Elementary
Grades
Rochester, New York

Julia A. Markham
Principal, Public Schools
Bronxville, New York

Bernice Newell
Supervisor of Instruction
Minneapolis, Minnesota

Leonard B. Wheat²
Central Y.M.C.A. College
Chicago, Illinois

Editor's Note: A questionnaire was also sent to J.O. Addicott, director of curriculum and instruction in the public schools, Fresno, California. In reply Mr. Addicott states that their reorganization is still in paper form and has not actually been put into operation. We shall hope for a detailed reply at some later time.

Previous to the preparation of the questionnaire, Forbes H. Norris, assistant superintendent of schools, Richmond, Virginia, was invited to prepare a brief manuscript describing an experiment with an integrated kindergarten first-grade program carried out under his direction. His manuscript will be published later.

The five school systems represented in this questionnaire are not the only ones that have been and are experimenting with reorganization. *Childhood Education* hopes to publish from time to time similar information about experiments in other places.

¹ Mr. Dimmett states that his assistants, O.L. Thorson and T. D. Sutton, helped to prepare the replies to his questionnaire.

² Mr. Wheat was formerly superintendent of schools, Western Springs, Illinois.

Are you satisfied with the plan of promoting children from grade to grade? Are you distressed at the number of children who "fail" from year to year? Would you prefer a more flexible daily program? This symposium suggests changes which have brought satisfaction to others concerned with similar problems.

The Questionnaire

I. State briefly the philosophy of education upon which your reorganization plan is based.

Summary

The trend is definitely toward the Dewey-Kilpatrick philosophy of education which regards growth of children as the most important factor in the educative process; that looks upon the curriculum as a succession of life experiences; that defines learning as modification of conduct through experience; that recognizes maturation levels and makes administration of the schools flexible enough to meet them; that our chief job (as one collaborator puts it) is to "help children meet personal and community problems in a democracy."

II. List the steps followed in introducing the plan to (a) Teachers, (b) Parents.

Bronxville

Teachers: The plan was introduced largely through the solution of problems that came up in school, sometimes in faculty meetings, in discussion of individual children, in working on the curriculum, or in committee meetings where particular phases of the program were discussed.

Parents: Parents have been introduced to this way of thinking through individual conferences, meetings with mothers in particular grades, and in committee meetings where parents have been asked to discuss a problem or

plan and to give advice to the faculty; outside speakers have discussed education.

Forest Park

Teachers: (1) Some of the teachers and supervisors had had recent professional courses that had stimulated a desire to do some original work along the line of re-organization, particularly on the primary level. Their interest stimulated that of others and plans began to develop. (2) A series of weekly teachers' meetings were focused on the study of the *Thirty-sixth Yearbook of the National Society for the Study of Education*, and other available materials on the teaching of reading. (3) Plans were discussed and refined and the teachers were urged to incorporate them into their own procedures.

Parents: (1) No advance pronouncements were made to parents. However, "Open House" visits together with pupil reaction led parents to realize that their schools were doing something more than following traditional paths. Parents' questions were answered and discussion was encouraged. (2) In "The Forest Park Teacher," published by the teachers and distributed to all homes represented in the schools, articles appeared explaining what was being done in the various rooms and departments of the schools. (3) A board of education bulletin also appeared in which the reorganization as it applied particularly in the primary department was explained. Detailed plans of activity units that had been used in several schools and actual photographs of the schools in action were also included. (4) Development of new forms for pupil progress reports to parents. More than five hundred types of reports were examined and the end product resulted from the critical evaluation and amendment by the entire staff. The reports became a continuous program of "selling" the new plan to parents.

Minneapolis

Teachers: (1) During the past seven years, groups of teachers, principals, and supervisors have been studying the problems of a better educational program for young children. These problems were given particular attention in an experimental study conducted in eight schools by the director of curriculum and in a series of discussion meetings with principals and supervisors conducted by the assistant superintendent. (2) The results of this study are being assembled by a committee of teachers, principals, and super-

visors in the form of a handbook or guide for teachers' use.

Parents: (1) Principals and teachers in eight experimental schools talked over changes with parents. (2) A change in type of reporting to parents, adopted for city-wide use, resulted in many principals' discussions of the new report forms with parents. (3) A series of talks were given by the assistant superintendent to the College Women's Club over a period of two years. Members of the committee working on problems of the early elementary grades gave talks at parent-teachers' meetings.

Rochester

Teachers: (1) Group meetings with the director of the department. (2) Meetings with principals.

Parents: Meetings with parent groups, led by the principal, director and supervisors.

Western Springs

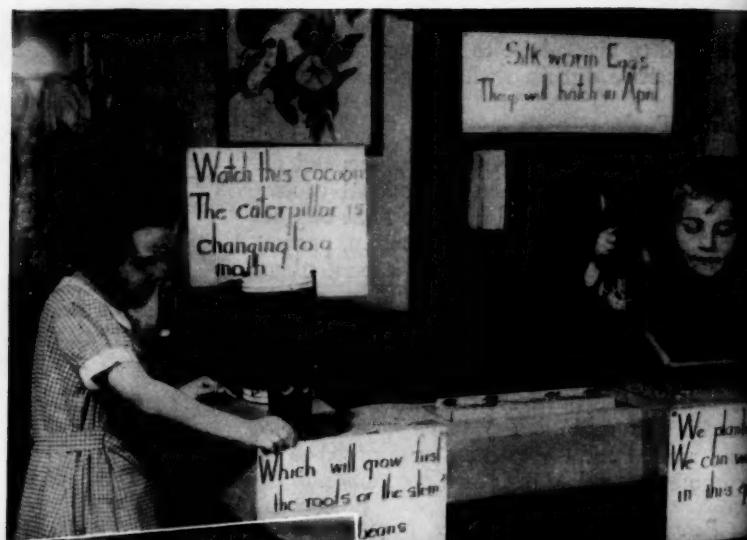
Teachers: (1) The plan was introduced after careful preparation for it with the teachers. It affected the first grade pupils only during the first year. (2) The second year it was extended to include what formerly had been the kindergarten, first, second, and third grades.

Parents: (1) The parents were informed of the operation of the new system in the fall of the second school year. A general meeting of the parent-teacher associations, articles in the local newspaper, and mimeographed sheets of explanation, which went home with the report cards—all were used. (2) Each teacher held a meeting for the mothers of her room, in which questions were answered and an explanation of the underlying philosophy as well as the type of organization was made.

Summary

In most cases it was not necessary to introduce formally the plan to the teachers, since the need for a plan arose naturally out of the professional discussions which are characteristic of all modern school systems. The details of the plan were worked out cooperatively over a period of months and in a few cases over several years. Parents were apprised of the plan through bulletins, personal interviews, home reports, and "Open House" programs.

III. *With what group is the plan in effect?*
(a) Kindergarten-first grade, (b) First



Evansville, Indiana, Public Schools

Activities a



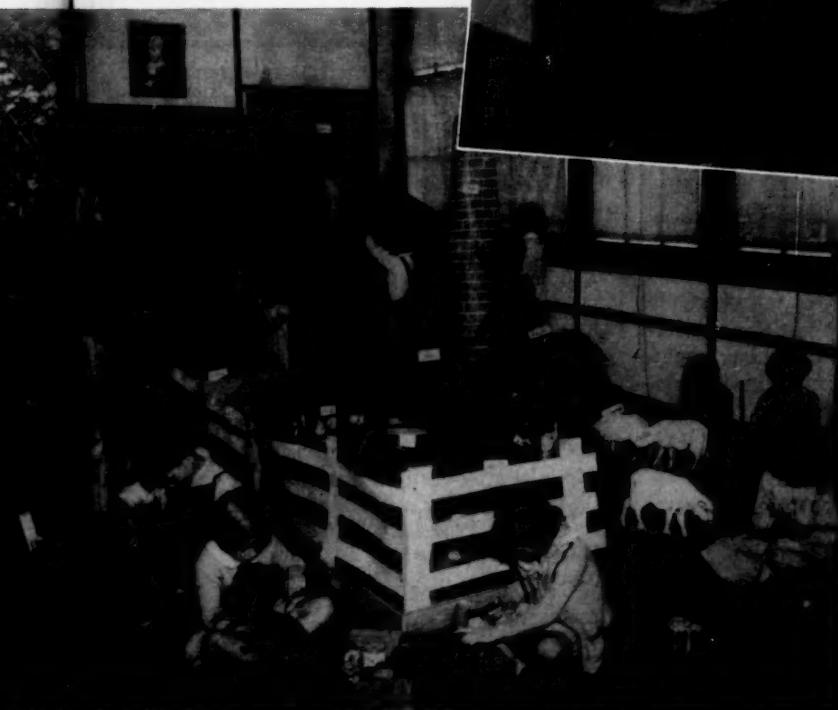


Evansville, Indiana, Public Schools

Creates a Purpose



Hibbing, Minnesota



Atlanta, Georgia, Public Schools

two grades, (c) First three grades, (d) Kindergarten and first three grades, (e) Other combinations?

Bronxville

The plan is in effect to the greatest degree in kindergarten and the first three grades. Scattered throughout the school, however, are many teachers in other grades who consistently put such a philosophy of education into practice.

Forest Park

Instructional reorganization was not an event. Rather it is a process. Only gradually are the readjustments being made. The primary department—grades one, two, three—was the point of initial reorganization and in this segment the new plan can now be considered as definitely in operation. Not all teachers have achieved a like degree of readjustment because of such varying factors as professional background and interest in the new plan, and physical handicaps to establishing the new procedures.

During the present school year, the reorganization is being extended to the intermediate and departmental departments (junior high school). Except for the fact that under the old plan a small percentage of pupils would have been retained in their previous grades, there is no difference between the membership of the class groups as they stand and the grade groups that the teachers would have had under the outmoded plan.

Minneapolis

Kindergarten and first three grades.

Rochester

Kindergarten and grades one through seven. The type of procedure in the primary promotional unit—kindergarten through third grade—is followed in the same way in the elementary promotional unit—grades four through seven.

Western Springs

The Flexible Progress Group System³ originally went only through the primary grades. It has since been extended through the sixth grade.

³ For a more detailed description of this system see "The Flexible Progress Group System," by Leonard B. Wheat, *Elementary School Journal*, November, 1937, 38:175-83; or "The Flexible Primary School," by Mr. Wheat, *The Nation's Schools*, October, 1938, 22:26-28.

Summary

In general, reorganization took place in the four-year span of child experience which begins with the kindergarten and ends with the third grade. Stated in terms of chronological age, this means the inclusion of all children from five to eight years of age. In a few instances reorganization was confined to the kindergarten and the first grade and in several school systems the success of the reorganization of the primary unit led to the establishment of an upper elementary unit including grades four to six, inclusive, and children between the ages of eight and twelve.

IV. *Is your plan based (a) Upon reorganization of the curriculum? (b) Upon child maturation and growth? (c) Upon environmental factors? (d) Upon administrative factors? (e) Upon a combination of any of these? (f) Upon other factors?*

Bronxville

A combination of all factors listed.

Forest Park

The Forest Park plan is based upon a combination of factors. Administrative changes are discussed under questions 3, 7, 8, 9, and 10. Child maturation and growth are very fundamental to both the theoretical and the practical aspects of the plan. Environmental factors are given a place of prominence through the close tie-up that is sought between school life and out-of-school life, through the activities which are the core of the instructional program. The curriculum factor is tremendously important, for a totally new philosophical and practical approach to it is involved in the shift to the new plan. The Forest Park plan constitutes an adaptation of a practical situation to a progressive point of view in education.

Minneapolis

Child maturation and growth; upon certain administrative factors; upon an interpretation of the curriculum as a flexible, ungraded guide.

Rochester

Reorganization of the curriculum and child maturation and growth.

Western Springs

The plan is based primarily upon child ma-

turation and growth. No reorganization of the curriculum is needed.

Summary

Since we accept a definition of the curriculum as a sequence of desirable life experiences which take place both in school and outside of school, the curriculum factor, the environmental factor, and the factor of maturation were very closely linked together in the reorganization.

V. *What is your basis for grouping? (a) Chronological age, (b) Achievement test results, (c) IQ test results, (d) Social maturity, (e) Reading ability, (f) Interests and needs?*

Bronxville

Our basis for grouping is a combination of chronological age, social maturity, and particularly interests and needs.

Forest Park

Grouping is not a planned procedure under the new plan. Class groups are not manipulated. It happens that the first year pupils in each of the schools comprise a group that can readily be administered as a class unit. They are of legal compulsory school age and they come to us destined, for the most part, to spend eight years in the schools. The school's job is to make these years from six to fourteen as wholesome and stimulating a growth period as possible. Knowing that they will stay with the school eight years, we choose to designate them enroute according to the year of attendance, and for purposes of class grouping, the pupils are segregated on this basis. Thus we can say that the pupils are grouped on the basis of chronological age.

With the beginning of a new school year the pupils will probably have a different teacher and occupy another room. They have not been promoted, but are merely continuing on into another year of school life—not into another grade. Except for withdrawals and transfers, the group does not change. However, within the class group itself, all pertinent information about each individual child is basic to the teachers' instructional procedures. All available information relative to physical, mental, social, and emotional maturation together with knowledge of special abilities, aptitudes, interests, and needs will serve to guide the teacher in all her dealings with each child. Usually, practical neces-

sity will demand groupings within the group. At certain times these sub-groups will be based on reading maturity, at other times on a factor quite unrelated to any scholastic achievement rating. No sub-grouping is sought as an end in itself—but is employed as a means to an end.

Minneapolis

We have no well-defined grouping plan. A group of children enter the kindergarten when they are five and spend a year in each succeeding grade. Social maturity, IQ test results, reading ability, interests and needs—all are considered in adapting instruction to them in the classroom.

Rochester

All the points listed in this question are taken into consideration. Reading ability is especially considered in the kindergarten-primary unit.

Western Springs

Grouping at the kindergarten and beginning first grade levels is primarily on the basis of mental age. The first grouping in the kindergarten has to be on a basis of chronological age, but this is soon modified as the teacher gets acquainted with the children and intelligence tests are given. When the pupils have progressed a few months with first grade learning, the main basis for grouping shifts to educational age. Achievement as measured both by ordinary teacher tests and observations, and as checked three times a year by achievement test results, serves as the measure by which pupil placement in learning groups is determined. Social maturity, emotional maturity, and other significant factors are given consideration in the grouping of pupils.

Summary

The original basis for grouping in the kindergarten was, of course, chronological age, and this basis continues to be the controlling factor throughout the primary unit. As children grow older, however, the other factors of social maturity, of interests, and of needs become increasingly more important. Whenever a teacher has had the same group of children for many months, other factors than chronological age tend to become increasingly important.

VI. *Do the groups consist of a fixed number? Of a maximum or a minimum number? Or is the number entirely flexible?*

Bronxville

The number is entirely flexible within limits. We would not put more than thirty-five in a group and would probably not keep a group that was less than sixteen or seventeen.

Forest Park

The class groups do not consist of a fixed number of pupils. The new plan makes no attempt to re-allocate children among different schools of the city nor to establish a new classification of the pupils within each school.

Minneapolis

Approximately thirty-five to forty pupils are in a classroom. Grouping takes place within the classroom and is very flexible.

Rochester

The groups do not consist of a fixed number. The number is controlled, to some extent, by a required city average of thirty-six pupils per teacher. We try to set the minimum number of eight for any group within a grade. The number is flexible.

Western Springs

The number of groups is not fixed. They vary in number from year to year, from classroom to classroom, and for different times within a year in any given classroom. The number and composition of groups within any classroom will vary from about three to five, depending upon the learning progress and needs of the children at various times.

Summary

The number of pupils per teacher follows the usual administrative plan common in American school systems. The average number of pupils per teacher ranges from thirty to thirty-five.

VII. *Are grade designations used? If not, what is substituted?*

Bronxville

We try to get away from grade designations. However, we do talk, for administrative purposes, in terms of grades. Since there is a very wide achievement range within each grade, the grade designations mean very little.

Forest Park

Grade designations have been eliminated. It

is thought preferable to refer to the fourth year group rather than to the nine-year-old class because the ages cover practically a year's spread and although at the beginning of the year all the members of the group might be nine years old, birthdays occur during the year to change the age classification.

It might be asked whether or not this shift from grade to year designations implies more than merely adopting a new nomenclature. Indeed, it does. The fundamental implications of the new plan are involved in this shift of emphasis. Each teacher is in charge of a group of children of relatively uniform age that have attended school the same length of time. She must accept this group at its level of achievement and maturity rather than at an arbitrary grade level. The point of departure for all teaching becomes the level of maturity at which the child happens to be. The teachers' responsibilities are not reduced in any way. High individual achievement becomes a definitely attainable goal.

Minneapolis

The first four years are designated the Early Elementary Unit. Grades are designated.

Rochester

The organization of the curriculum provides for two centers of interest at each grade level. These designate the placement of a pupil. We have not entirely dropped the use of grade designations.

Western Springs

Grade designations are used only to indicate relative progress. Main attention is focused upon achievement goals, although the children and parents are informed regarding what goals are considered as belonging to each grade level. The relationship of grade levels to years in school is entirely disregarded. We think more in terms of learning levels in relationship to the maturity of the child. We try to disregard chronological age and number of years in school.

Summary

The terminology which is used to identify the reorganized unit in the lower school varies from system to system. Some schools retain the regular grade designation. One system uses the terms Five-Year-Old Children, Six-Year-Old Children, Seven-Year-Old Children, etc.; oth-

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ers designate the classes as Group One, Group Two, Group Three.

VIII. Is the daily program scheduled or free, with periods for activity, for work, for conference?

Bronxville

The daily program is free, with periods for free activity, for work, and for conferences. There is scheduling for special teachers and such other scheduling as the teacher may deem wise from time to time.

Forest Park

It has seemed the part of wisdom to retain, for reasons of economy and in deference to special teacher training and interest, some of the features of our old organizational set-up. For example, a platoon plan is operated in the middle grades and the junior high school is departmentalized. These and other considerations occasion some rigidity in our daily programs that may or may not detract from the effectiveness of the plan. It has been assumed that the new plan can function without completely redesigning the internal organization of the schools.

In general it can be said that work activities, construction and creative activities, cooperative planning, and conference are fused in what is ordinarily thought of as the activity period.

Some of the subjects, notably arithmetic, still hold a definite place in the daily schedule. The curriculum has not been entirely revamped although the teaching approach has been. The essentials of subject matter have lost none of their significance. The findings of educational science relative to subject matter placement and readiness can be used to full advantage by teachers working under the new plan.

Minneapolis

The program provides for activity and conference periods. It is very flexible.

Rochester

The daily program is not scheduled. It is very flexible and provides time for free activity, for work, and for conference.

Western Springs

We are not an "activity" school in the generally accepted current sense. In fact, we shun the neo-progressive philosophy in this regard.

We have a definite course of study and daily program. The children do have free periods each day in which constructive, dramatic, and other activities (which are the outgrowth of the curriculum) are carried on. The activities are definitely subordinate to the prescribed course of study. The course of study is not an outgrowth of expressed pupil interest.

Summary

In general the daily program consists of an extended "activity" or "unit of work" period followed by subject matter time allotments—reading, language, arithmetic, and so on.

IX. What determines the basis for promotion, if any? May promotion take place at any time a child is ready, or does it take place only at stated intervals?

Bronxville

A child is promoted when he no longer fits into the social group. He may be promoted at any time. However, since there is a strong group feeling, children are kept with their group if possible and allowed to develop individually.

Forest Park

Failure and acceleration are entirely eliminated from the new plan. Likewise, promotions in the usual sense are passé. Pupils remain in the primary department three years. During all of this time they are provided with as rich and stimulating growth environment as can be offered. Progress is not a matter of promotion milestones and grade achievement hurdles. Growth is the goal. If the rate of maturation is slow due to inadequate initial readiness or to low quality mental equipment, the facts are recognized and their challenge accepted, but they are not identified with failure. Likewise, rapid growth, mental, social, or emotional, is accepted as a cue for appropriate enrichment of experience. Having completely removed promotions, grades, and group rankings as incentives, as well as failures and retardation as constant threats, the problem of motivation assumes much more significance than in a formal school.

Minneapolis

Promotion takes place at the end of a semester. Promotion is based upon growth which has been evidenced during the semester. In some instances, it is affected by size of class enroll-

ment in which the teacher's ability to give needed assistance will be possible.

Rochester

Centers of interest determine the basis for promotion. We speak of children beginning a new center of interest instead of speaking of promotion. When a teacher feels that a group of children have satisfactorily completed a center of interest, one of our own curriculum tests is given. This is very informal. The teacher then decides the time to start the new center of interest, which may be at any time a child is ready.

Western Springs

Promotion is made daily. The children are always going ahead. There is no time such as the end of the year when the children are given a formal promotion to a higher level. All children begin in the fall at the place where they left off the preceding spring. They are moving on from goal to goal, rather than from grade to grade.

Summary

Most of the school systems reporting have done away with promotions as such and moved the child from one group to another whenever it appears that he will profit by a change. In general the basis for change is social maturity or the absence of it. One writer says that children are promoted "Daily"; another says that the child is promoted "when he no longer fits in his social group." One system reports a basis for promotion to be the completion of a center of interest.

X. In how many schools is your plan being used? (a) In all schools? (b) In a few schools? (c) In one school?

Bronxville

There is only one school in Bronxville.

Forest Park

The new plan is being used in all schools. The organization of the schools of our village is determined to considerable extent by geographical factors. Departmental junior high schools operate in two of the schools together with intermediate and primary departments. The other two schools have only primary and intermediate departments. A kindergarten is maintained in each of the schools.

Minneapolis

In approximately one-fourth of our eighty-

five elementary schools. (Note: A committee of principals, teachers, and supervisors which has been active in reorganization plans as described above is now preparing a handbook or guide which it is hoped will be available to interested schools in September, 1939.

Rochester

The plan of promotion described under question 9 is in operation in all schools.

Western Springs

The plan is being used in all three of the public schools. It has now been adopted also in a number of the Chicago suburbs.

Summary

Most school systems reporting have applied primary reorganization to all their schools. A few have preferred to deal with the matter in a few experimental schools until more is known on the subject of reorganization.

XI. How long has your plan been in effect?

Bronxville

We have been working on it for fifteen years.

Forest Park

The new plan was initiated at the beginning of the school year, 1937-38. Its establishment did not become effective in the same degree and at the same rate in all the rooms and in all the departments. In order to avoid premature haste teachers have been permitted to adjust their various situations to the new set-up at the rate prompted by the self-assurance of each to carry on under the new plan. There is no magic spell that can "sell" this or any other program to forty or more teachers in a brief time. It must grow on them. Experimental attempts must be encouraged and guided.

Minneapolis

Experimentation began in 1932.

Rochester

Since September 1933.

Western Springs

The Flexible Progress Group System was first instituted in the fall of 1934. It has been in complete operation through the primary levels since September, 1935, and through the whole elementary school since September, 1937.

Summary

In general, reorganization has taken place during the last two years although one school system reports that experimentation along this line began in 1932, another school system in 1936.

XII. *What evaluation would you place upon the program as it now stands?*

Summary

The outcomes of the plans of reorganization which are reported upon appeared to be as follows:

Teachers have become more sensitive to the needs and interests of children since they are with them for a longer period of time.

Children are more interested and happier in school because they do not have to face the semi-annual fear of non-promotion.

Competition has been transferred from the field of vying against another child in order to obtain promotion or marks to the field of the child vying with himself in order to better his own record.

Teachers are becoming conscious of the continuity of child life over a long block of years in distinction to their previous view of a small segment of it.

Parents are more satisfied because of the removal of the semi-annual bickering over the failure or the fear of failure by their children.

I am greatly impressed by the comment of Mr. Welborn S. Dimmett of Forest Park, Illinois, who says very truly that our evaluation of the primary school is both an impression and a hope. I gather that the impression is that while we have made many mistakes, children in the primary school are far happier and realizing a higher quality of living than under the old graded system. I gather that his hope is that the freer atmosphere of the primary school will result in the development of well-rounded and effective personalities in children, themselves.

The thing which impresses me most in our own experimentation³ over a period of four years is that the teachers are far happier in the freedom and joy of the lower school than they have ever been before throughout their entire professional life. It is a great triumph when, for the first time, teachers can be led to see children as the most important persons in the school and lose their respect, in part at least, for such artificial inventions as grades, subject matter, and daily programs.—*Robert Hill Lane*.

³ For a more detailed picture of the present status of this experiment see Mr. Lane's new book, *The Progressive Elementary School*. Boston: Houghton Mifflin Company, 1938. Also his article, "Organizing the Primary School," *Childhood Education*, November 1937, 14: 110-113.



The Primary Teacher

THE ideal primary teacher is a woman with pronounced mother instinct who loves children and believes in them. She is convinced of their worth to society as children, not alone as potential adults. She has a sound, practical philosophy of life, is innately refined and cultured, has a scientific attitude of mind—suspending judgment—and possesses tact, vigor, enthusiasm, zeal, ingenuity, resourcefulness, adaptability and optimism. She is industrious but knows when to quit work and how to play. Her contact with many phases of life is broad and wholesome. Her sympathies are deep, not sugar-coated or false.

She can smile and laugh, but knows how to guard against the proverbial primary grin. Her attire is neat and colorful.

She is a selective agent in her classroom, not a dictator. She is not afraid to show as well as tell. She is childlike without being childish, and expresses in voice, posture, walk, poise, activity and courtesy the qualities which she wishes to bring out in her children. Her best score card for self-rating is herself as reflected in her class of little unconscious imitators.—*Jane McKee, supervisor of elementary teaching, University of Southern California*.

Spotlighting Activity Programs

FREDERICK PISTOR

IT WAS shown in the first part of this study, published in the November 1938, issue of *Childhood Education*, that some activity programs are started because of selfish and inferior motives and that therefore no socially desirable changes can be effected by them. In addition, there are many weaknesses found in classroom activities that are not necessarily inherent in the activity program itself, but are due to the teacher's interpretation of the program and her lack of knowledge and teaching skill.

Since the activity program is scheduled in periods bearing so many different names, the use of which is misleading, it is better to distinguish the activities according to the purposes dominating them. Thus classified they are:

The Construction or Creative Work Period—activities where the class is attempting construction or creative work.

The Problem-Solving Period—activities where a challenging problem is being considered.

The Drill Period—activities where a skill or habit is being acquired or strengthened.

The Appreciation Period—activities where the children enjoy some product of beauty.

The Class Conference Period—activities where the pupils are conducting a class meeting.

The Play or Rest Period—activities for rest, recess, recreation, and play.

In order to study the activity program in a large number of classrooms in many scattered communities, the writer was unable to observe all phases of the program in each school. Furthermore, it would probably have been unfruitful since only certain types of activities represent the fields in which new practices have been introduced. Of the six types listed above, the writer studied the first three—the construction or creative work activity, the problem-solving activity, and the drill activity.

Mr. Pistor of State Teachers College, Silver City, New Mexico, concludes his study of activity programs by describing, evaluating, and giving constructive suggestions for improving three types of classroom activities—construction and creative work, problem solving, and drill activities.

CONSTRUCTION AND CREATIVE WORK ACTIVITIES

Of these three activities, the construction or creative work activity is the one in which schools most often have taken the first steps in reorganizing their programs. There are several reasons for this: (1) Construction work can easily be added to the existing program with few changes in scheduling and equipment; (2) The work deals with tangible materials that can be understood easily by teachers, pupils, and parents; (3) The activity often reinforces the teaching of conventional subject-matter and therefore wins favor in some quarters; (4) The material results—completed model airplanes, woven rugs, doll houses—are often interpreted to represent growth in the pupils.

In many cases the construction or creative work activity has been the only new-type period to be found in the activity schools. It goes under various names—free period, activities period, construction-work period, creative-work period, arts and crafts, industrial arts, work period. Very often the new-type work has been added to the regular traditional program. In such cases, the various traditional school subjects are scheduled as such. Then, when some interesting topic appears in any one of them, it becomes the subject for some physical or manipulative activity during the construction period. In

such programs, physical, manipulative, and experimental activity is distinctly limited in the classroom except during the construction period.

When one studies construction work closely, by means of the processes through which the pupils go, rather than by means of the finished products that are exhibited, he sees certain common weaknesses in all the schools. Usually the tempo of the work is such that the children have little time in which to experiment, to create, to initiate, to plan their work, or to judge the results of their efforts. This seems to be due to the fact that the teacher is the only one who knows what is to be done. The children are trained to let her initiate the project. She has certain adult standards of performance that she wants to impart, and the pupils receive almost no opportunity to suggest ways of carrying out the project or to evaluate various suggestions. Furthermore, the project is planned to take a predetermined number of periods. A schedule is worked out for each step of the job, and the teacher's concern is to see that the pupils live up to her schedule.

This technique, borrowed from the traditional school and the factory, is so efficient that its use counteracts the objectives of the work. Each period becomes a "lesson" in itself. Although they may be organized into small groups or committees and seemingly may use democratic ways of deciding, sharing, planning, and carrying out their work, the pupils still follow directions. Since they very often have no real challenging purpose and since they depend upon teacher-direction, they react accordingly throughout the activity. Of course the pupils prefer this work to the other lessons that they have "at their seats," but they are not experiencing the big thrills that could be theirs under improved conditions.

In too many instances the teacher is still concerned more deeply with the product that is being created than with the develop-

ment of her pupils' personalities. This is caused partly by her ability more easily to understand tangible things like model toy villages, rug looms, and marionettes than the intangible values to be derived from group initiation, planning, execution, and evaluation. She has some visible results of her work as the model airplanes, rugs, and marionettes take shape, whereas she has not been taught how to record progress of children in various social learnings, such as the ability to initiate, to cooperate, or to assume responsibility.

Unless the teacher is a recent graduate of one of the few teachers colleges operating an experimental school in which she has gained experience with the new type of learning situations, she does not know the techniques of using situations in the construction period for developing her pupils. No number of theory courses nor recent books can give her the needed skills; only guided experience in a laboratory school can do this.

It is to be remembered that these schools are sincere in attempting to give pupils the benefits of the new education. In doing this, they are allowing the traditional program to change slowly into the activity program as the accompaniment and the result of growth. At this stage most of these schools have no complete activity program but a combination of the old and the new. It is natural that the easiest part of the new program be attempted first. That is why the construction activities have appeared in so many places.

In general much good is appearing as a result of the introduction of these construction enterprises. However, more good would result if these suggestions were followed:

1. Give the pupils much more opportunity to suggest what to make. This may be difficult at first because of their inexperience in choosing, and may result in many unwise choices, but that is necessary in all learning.

2. To the freedom of selection attach as much responsibility as the pupils can take. This responsibility cannot be much at first, but should be a growing thing.
3. Do not be concerned if the selection of the pupils does not fit in with their other work. As long as the project is neither too easy nor too difficult it should provide enough opportunities for growth, irrespective of the grade-level of the children.
4. There is no special educational advantage in having all pupils do the same thing or even parts of the same project. Allow minority groups to follow their own interests.
5. Have frequent, but short, class meetings during the construction work to allow children to raise questions about their project, to suggest solutions, and to share experiences. This helps to develop a spirit of group responsibility and tends to raise group standards. If what a child does is approved by his class, he tends to propose more worthy activities.
6. Make sure that the children have plenty of time in which to initiate a project, plan it, carry it out, and judge its results. If the project is a complex one, have the pupils divide it and subdivide it into various parts. Let them work out a plan of attack for the various parts. Make sure that each part is developed by proceeding through the four steps—initiation, planning, execution, evaluation.
7. Since pupils have little experience with democratic processes, proceed slowly with them and teach their significance as you progress. Begin with simple methods of choosing. Teach pupils how to choose. List the factors that should influence a choice, presenting two or more sides of the problem. When all factors have been considered, have them make the choice. At no time allow the pupils to gain an inkling of the teacher's preference in the matter until such a stage of the pupils' development has been reached that they have achieved enough independence of thought to choose without regard for it.
8. Expect many negative or undesirable trait-actions to be manifested as well as the positive or desirable ones. This is one purpose of the work; it reveals personalities in action. Seize upon both types of trait manifestations as opportunities for education. Children learn how to behave only through such concrete examples of behavior as are manifested in their society. Use the laws of learning here. This may be very difficult at first, especially if the teacher is tradition-bound and finds it easy to resort to older disciplinary devices and measures.
9. Since a complete change-about in any method results in confusion, plan the steps in personality development so that change is gradual. Try one new step at a time, and do not attempt too large a step. When teaching good housekeeping habits in connection with cleaning up after a construction-work period, begin by making places for tools and supplies. Establish the habit of returning things to their places. When this is partly accomplished, teach economy in the use of tools and supplies. Follow this by a more difficult achievement. This does not mean relaxing in the practice of earlier habits. It means that as the child matures, he is held responsible for more. When a class of thirty or more pupils is habituated into desirable ways of working, very much more can be accomplished than public school officials even dream of.
10. Keep complete records of all undertakings. As soon as a child has learned to write, hold him responsible for using that skill in keeping records of all kinds. Individual plans and achievements should be recorded. Minutes of all group action should be kept. If properly guided, this should result in more efficient activities and in much functional learning of English.

PROBLEM-SOLVING ACTIVITIES

While most schools that have adopted activity programs have construction or creative-work periods, very few have adopted other types of activities. The problem-solving activity, for example, the dominant purpose of which is to solve challenging problems in geography, history, or science is of very much the same caliber as in the past. Although the schools have revised their courses of study listing many progressive theories and practices, what happens in the classroom is a different matter. The paper course of

study does not agree with the real course of study. This may be due in part to the natural lag of practice behind theory. It may be due to the practice of making the course of study in advance rather than after the activity has been established. The important thing to note is that not much is being done with social studies and science materials to educate children in accordance with the principles underlying the activity program.

What are the chief characteristics of this work as found in the schools under consideration? A greater number of reference books are used. More modern and more numerous visual aids are employed. Objective questions appear often in the tests and exercises. More frequent use is made of the local environment, especially in the primary grades. A great number of collections made by pupils are exhibited. The work is organized on a unit basis—this last characteristic distinguishes the activity program from the traditional.

The organization of geography, history, science, and other content material on a unit basis is of two types. The first type is the subject-matter unit. It often consists of a topic differing but slightly from the customary chapter of a textbook or part of any logically-organized course of study. In some cases it consists of reorganizations of history or geography material in which certain general themes are stressed. Examples of such units are homes, food, and transportation. The subject-matter unit is subordinated under a subject title. Thus there are units in geography, units in history, and so on. The guidance of the educative process in such units consists of the teacher setting the assignment, requiring the pupils to learn it, testing the learning, and assigning scores to the tests.

The second type of unit found in schools with such activity programs is the experience unit based on a center of interest. It consists of activities and objects that may be

classified under one heading such as airplanes, the grocer, or Indians. It is selected by the children, by the teacher, or by both. Frequently a whole term or an entire year is required for one unit.

Two failings mark the center-of-interest unit. In some schools the unit lacks real continuity. The teachers cannot show how one activity leads to the next. There seems to be no vital relationship of one activity to another. This connection might be brought out by means of frequent summaries of old material, outlines of present subject-matter, and previews of fields to be explored. In other schools the opposite extreme is found. The teacher makes use of a high spot of interest to swing the children into a study of topics which she considers good because they appear in traditional courses of study.

At present none of the schools described in this report are experimenting with units based entirely on genuine pupil purposes. In some quarters this is a step the teachers would like to take, but for some reason they are not ready. Inquiry about the practicability of genuine pupil-purposed problems as a basis for school work elicited certain common replies: (1) Children are not sincere in suggesting problems. They try to guess what the teacher wants and then give such guesses as their own preferences. (2) Children don't suggest important enough problems. (3) Children do not know how to work on a problem after it is chosen. (4) Children are not willing to work hard enough or long enough to solve a problem.

The apparent difficulty lies in getting things started and in being content with meager visible results at first. Study of various curves of learning shows that a rapid initial rise is by no means a universal characteristic. The actual increase in output often rises slowly or not at all in the early stages and then more rapidly in the final stages of an extended experiment. This is not necessarily an indication that the learner is not

progressing in the early stages; usually it means only that what is learned has little or no effect upon the score.

In studying the sincerity of children's questions we attack an important problem. Before children are old enough to begin school they are asking questions of all kinds. How do they learn to ask questions that are not sincere? The traditional school has been responsible for this. For years pupils and teachers have been confusing the topics in the course of study with their own interests. This has become such a habit that we regard it as the correct thing to do. When we decide to change this, we must expect difficulties because we are trying to substitute a new type of behavior for one that is firmly rooted. Therefore, in our first attempts at such a change, we can expect pupils to continue guessing what the teacher wants them to study, unless they are very young primary-grade children still unspoiled in this respect.

Let us consider the problem of "important" questions next. When a child asks questions we must teach him to evaluate them. Some will be important, some will be trivial, some will be foolish. Some of the questions will be important to the child but appear unimportant to the teacher. This is no reason for abandoning question asking, but a good reason for having more of it. How can children learn to ask important questions if they don't have practice in asking all kinds of questions and in evaluating their importance? Guidance in these valuable experiences must not impair pupil personalities by inhibiting the inquisitive impulse.

In regard to the third and fourth difficulties, when we are sure that the problem which the pupils have chosen for study is genuine to them, the working of it will be on a different plane. In guiding pupils in problem-solving activities we must make sure that satisfaction is derived from the search for solutions to the problems. This

involves the acquirement of the tools of learning—listening, observing, reading, writing, studying, and others. Our present methods of accomplishing this make study distasteful to most children.

The following suggestions may be helpful to teachers ready to use children's problems as material for units:

1. Give much encouragement to the constant formulation and recording of problems. It is not necessary nor desirable to use all of them or to find answers to many of them. Part of our education consists of listing—in our minds, in writing, or otherwise—problems for our future consideration and attack. None of us ever solves all our problems, nor is it desirable that we should think we do. It is educative to realize the large number of problems that remain untouched by individuals and by society as a whole.
2. Develop with the children some techniques for evaluating and selecting a problem for study. At first these will be simple and few. As the child matures, he will develop additional and more complex techniques. Once a problem has been selected, insist that the pupils see it through unless they give very good reasons for wanting a change.
3. Throw upon the pupils the responsibility of suggesting ways of solving the problem. Do not rob them of the growth that they should thus experience by preparing bibliographies, collections, exhibits, and other materials for them. Give the children adequate time and opportunity to find material for problem-solving, and show them methods of collecting data.
4. Make sure that the class attitude is right so that timid children and those with less oral language facility can feel free to offer suggestions. Provide for class evaluation of the contributions of the various pupils. The approval of one's classmates is a very strong urge toward improvement in study and class contribution.
5. Provide for devices that enable the pupil to see when his learning is progressing properly and when it is going astray. Don't let the child practice errors. Don't introduce highly artificial mechanical aids that produce unessential or harmful habits.

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that must later be broken. The use of directed study exercises to detect important facts, to observe the relationships between facts, and relationships of various facts to the general problem, is recommended.

6. Keep the class work integrated by means of summaries, outlines, reviews, and previews. The pupils may rotate in the position of the secretary who records the steps as they are made. The teacher should record the work as it moves along, and she can use this record to determine progress made.

DRILL ACTIVITIES

The writer found that while teachers are most eager to develop topics in arithmetic, language, reading, and other drill subjects from the larger units of work, they experience difficulty in doing this. Upon further inquiry and study it was found that often attempts had been made only over very short periods of time and without supervisory assistance when needed. If this investigation revealed typical school situations, it should be said that almost no effort was being made to organize the drill-subjects as by-products of the other activities. For this reason the writer has no patience with those who say it cannot be done.

It is entirely possible that most schools undertaking genuine activity programs are not quite ready to reorganize the teaching of drill subjects in accordance with the principles underlying the new education. In several cases where reorganization had been attempted, the teachers were not ready for the step. Instead, they should have been improving their techniques in the construction-work and problem-solving periods. It is believed that when the work in these two periods is developed to the point where teachers know how to guide pupil initiation, planning, execution, and evaluation of activities, many specific learnings will present themselves in natural settings. The problem then will not be a dearth of such learnings but a super-abundance. The teacher will be confronted with the problem of deciding

which specific learnings are to be isolated for study in the drill periods.

If one should undertake to drill in isolation all of the specific skills involved in a typical hour of activity, he probably would require several months of school for drill activity alone. However, human beings do not acquire learning only through isolated drill. Much learning can be acquired in larger and broader activities. Since some teachers find that about one-fifth of the school day devoted to drill is enough, if the rest of the program is not to be curtailed, the problem becomes one of selection. Of all the specific learnings that a child needs at a given time, which should be drilled and learned for good?

When considering the advisability of isolating some specific learning for practice, bear the following things in mind:

1. Can the skill be understood by the child who is to learn it? What are the recommendations of the experimenters concerning the mental age requisite for the understanding of the skill in question? Children must be of a minimum height before they can touch a given spot on the wall. Similarly they must be of a certain mental maturity before they can really understand some procedures in arithmetic and other drill subjects.
2. Must other skills be learned first before the proposed skill can be acquired? In some work such as arithmetic and grammar, some of the topics cannot be taught until prerequisite topics have been learned. In such cases the teacher must choose one of these procedures: (a) Teach the prerequisite if it doesn't take too long, and then teach the skill required for the activity; (b) Show the children how to do the step, but do not actually teach it. Consideration of the other factors given here may help the teacher in this choice of procedure.
3. Does the child need this skill at present more than some other skill? This calls for the ability of the teacher to balance the child's growth by selecting from the various tools of learning those that are most needed at a given time by a given child.

4. Is the skill important in the affairs of life outside of school? Since elementary school children come from all kinds of homes, it is essential that whatever is taught be of worth to all. It is well to bear in mind that not all children will be scholars. The proportion of scholars in the total population is small. The topics which appear essential to teachers who happen to be scholars are not necessarily essential to those with other interests.
5. Does the child really want to learn the skill? To the degree that the work appeals to the child as of real worth to him, will he desire to learn it?
6. Are other children ready for the skill? There is economy in grouping pupils for drill work. It is easier to supervise several groups of pupils during a drill period than to deal directly with each one of thirty or more individuals. It is the experience of school systems noted for their individual instruction techniques that it is not detrimental to group together several pupils who are ready for a new step. By this arrangement a few pupils must wait for others, but if a strict system of individual instruction is followed much time is lost in transferring from one pupil to another and while pupils wait for their turn with the teacher. Thus, it has been found more satisfactory to work with small groups than with individual pupils.

In a rich, well-balanced series of life activities, there is a need from time to time to acquire some skills and knowledge through sheer repetition and drill. These learnings, which are highly specialized activities con-

cerned with listening, speaking, reading, writing, studying, and computing, are often called the tools of learning. The problem of providing drill is not one of superimposing a drill program on an activity program; it is one of deciding how to select from all the specific skills that are needed in the other activities, those of greatest present value.

SUMMARY

I have shown that activity programs appear in public schools in two forms. In some communities the program is non-genuine because it serves some extraneous purpose. In other places it is a genuine, growing program dedicated to the improvement of education.

In the schools making sincere attempts to improve learning, most changes have occurred in the construction and creative-work activities. Fewer basic changes were observed in the problem-solving and drill activities. I have listed and described certain failures common enough to warrant report, and have offered constructive programs.

In a number of schools experimental practices have become crystallized and stereotyped. The dangers of the traditional program are being repeated. Leaders of some of the activity schools realize that they have just broken ground for the activity program. This is the attitude that should prevail among all attempting this new program.

Baby Things

When spring comes, baby things come, too,
Some soft and fuzzy, some bumpy and slimy;
Little sheep with soft white wool,
Little toads with bumpy skins,
Little snakes just learning to wriggle,
Little birds just learning to fly,

Little pigs that love to squeal,
Little dogs that love to bark,
Little calves that stay by their mothers.
Little colts with wobbly legs;
All these baby things and many others
Come with the lovely spring.

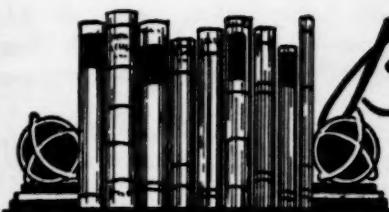
—Patsy, aged eleven
From *Finding Wisdom*, by Gertrude Hartman (John Day)

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Book... REVIEWS

Editor, ALICE TEMPLE

THE FIVE SISTERS, A STUDY IN PSYCHOLOGY. By William E. Blatz. New York: William Morrow and Company, 1938. Pp. xii + 209. \$2.50.

The Dionne Quintuplets have been carefully studied from the earliest days of their infancy by Dr. Dafoe, the man who brought them into the world and saved their lives, and by the members of the staff of the University of Toronto. Their physical and mental characteristics have been measured and recorded at frequent intervals by the best methods known to biology and psychology. This book prepared by Dr. Blatz who, as a member of the faculty of the University of Toronto, has been in charge of the psychological studies of the five sisters, gives an account in popular language of the mental and social development of these unique children. Dr. Blatz had access to all the scientific findings of his colleagues and has used these as a background for his psychological statements.

The Quintuplets were all descended from a single ovum. This fact has been established by investigations of a technical nature, the methods and results of which Dr. Blatz has succeeded in making clear to the ordinary reader. The common heredity of the sisters makes them highly interesting subjects for psychological study. It is found that in spite of their identical heredity and in spite of the fact that they have grown up in exactly the same environment, they exhibit differences in disposition, intelligence, and aggressiveness which show that post-natal development is of major importance in determining character. This evidence disproves the assumption which has gained wide acceptance in recent years that a person's traits are due in the main to heredity. The supposed stability of native intelligence, or of so-called intelligence quotient, can no longer be accepted in the light of this striking demonstration that marked in-

dividual variations appear in children who, by inheritance and surroundings, are much alike.

Dr. Blatz has pointed out the difficult problems which must be solved in directing the future education of the Quintuplets. The popular interest in these infants makes it almost impossible to provide them with anything that approximates a normal future. The fact that they are subjects of such general interest has made it possible for Dr. Dafoe and the others who have had them in charge to give publicity to scientific methods of child care which are the most approved practices of modern hygiene.

The book contains pictures showing the sisters in characteristic poses, and in this way illustrates in a concrete way many of the descriptive statements that are made. The book will be found by readers to be at once thoroughly scientific in its treatment and vivid in its descriptions. It is a distinct addition to the literature of psychology and education.—Charles H. Judd.

CHILDREN'S LITERATURE BY GRADES AND TYPES. By Oller Depew. Boston: Ginn and Company, 1938. Pp. xiii + 706. \$3.25.

This recent book, *Children's Literature by Grades and Types*, is primarily an anthology. As the title suggests, the selections are grouped by grades and arranged within each grade according to types—poems, folk tales, fables, modern stories. Introductory to the material itself, some ninety pages are devoted to brief but pointed treatment of a number of relevant topics: the historical development of literature for children, the various types of traditional and modern literature, ephemeral versus classical material, and literature in the school.

In this last section such topics as illustrated books, story telling, dramatization and the teaching of poetry are discussed. Many of the sug-

gestions offered here are generally regarded as representing sound practice. Certain others are open to criticism, however, such as the analysis, bit by bit, or such lovely bits of poetry as Elizabeth Madox Robert's *The Woodpecker* and Stevenson's *Dark Brown Is the River* with a first grade class. A safer course with the younger children, certainly, is to use one's best judgment in selecting suitable poems, read them as well as possible, and trust the children to make their own interpretations. If they fail to show interest and pleasure, the choice has not been a happy one, probably.

In the anthology proper selections for each of the grades have been chosen with reference to the "reading vocabulary, interest, comprehension and needs" of the children concerned. For the primary grades, however, ability to read has been, necessarily, a minor consideration. The author recognizes that most of the literature adapted to the interests and comprehension of these younger children must be read to them. She points out also that all grading of selections must be approximate and would allow a span of from two to four years for many of the stories and poems included in the collection. Certainly much of the material grouped here for first and second grade children is greatly enjoyed by children four and five years of age and some of it by children even younger.

This latest book will be welcomed by college teachers of the subject not only because of the wide range of well-selected material, both traditional and modern, which it contains, but because of its carefully worked out exercises requiring further reading, study and creative work on the part of the student, and the extensive annotated bibliographies. The classroom teacher will find here a valuable reference.—A. T.

STORY PARADE GREEN BOOK. *A Collection of Modern Stories for Boys and Girls by Noted Authors.* Chicago: The John C. Winston Company, 1938. Pp. ix+346. \$1.75.

Here is the third of the Story Parade books, all three of which have been compiled from *Story Parade* magazine. Like its predecessors, *The Red Book* and *The Blue Book*, it contains stories so varied in type that every boy and girl is sure to find many that are wholly satisfying. Tales of adventure, animal stories, imag-

inative tales, highly realistic stories and humorous stories—all are well represented. There are poems, too, both serious and gay, and two fine plays.

Among the noted writers are Walter de la Mare, Elizabeth Coatsworth, Laura Benet, Hildegard Hawthorne and Margery Clark. The stories are illustrated by such artists as Kurt Wiese, Dorothy Lathrop, Ellis Credle and many others. The attractive binding, clear type and quality of paper used add to the charm of these books.

The editors, publishers, and others responsible for *Story Parade*, in both its magazine and book forms, are to be congratulated on the high standards so continuously maintained.—A. T.

THE BOOK OF BELLS. *By Satis N. Coleman.* New York: The John Day Company, 1938. Pp. vii+177. \$2.50.

All who are familiar with Mrs. Coleman's *The Drum Book* will welcome *The Book of Bells*. The author has gathered a large amount of curious and interesting material about her subject from all over the world—superstitions, legends, facts. Christmas Bells, The Magic of Bells, Stories of Miraculous Powers of Bells, Chimes, Carillons, Bell Towers are some of the section headings which indicate the scope of the book.

There are stories of the great bells of different countries—our own, England, Russia, China, India and others. There is also a unit on bells including suggestions as to how to tune home-made bells of flower pots, nails, drinking glasses, etc., and finally a few bell poems, songs, and chimes. Illustrations on practically every page add to the charm of this unusual book. Older children will read it with interest and pleasure. Parts may be read to the younger ones in school or family.—A. T.

SHADOW PLAYS AND HOW TO PRODUCE THEM. *By Winifred H. Mills and Louise M. Dunn. Illustrated by Corydon Bell.* New York: Doubleday, Doran and Company, 1938. Pp. 207. \$2.00.

This is a fascinating history of the development of cut-out and human shadow plays from their early beginnings to the present time.—A. T.

BOOKS FOR CHILDREN

Editor, MAY HILL ARBUTHNOT

WEE GILLIS. By Munro Leaf. Illustrated by Robert Lawson. New York: The Viking Press, 1938. Unpaged. \$1.00.

Leaf and Lawson, those two young men who set a sad world chuckling over *Ferdinand*, have again joined forces. This time they give us *Wee Gillis* faced with the terrible problem of spending his life stalking stags with his father's Highland relations or raising shaggy cattle with the Lowland relations on his mother's side. How he solves this meaty problem is hilariously told in text and pictures by the inimitable Mr. Leaf and Mr. Lawson. Of course, you cannot miss it whatever your age, "grade," or estate.

BLACK BRUCE. By Margaret S. and Helen L. Johnson. New York: Harcourt, Brace and Company, 1938. Pp. 154. \$1.75.

Margaret and Helen Johnson can be counted on to tell their dog stories, not only with plenty of action and excitement, but also with rare insight into the nature of the dog involved. Their Dalmatian, *Tallyho*, was delightful; so was their *Spaniel of Old Plymouth*. This year they add a collie, *Black Bruce*, to their gallery of canny canines.

This is an unusually exciting story involving Newfoundland dogs in their native land where Bruce is also trained to do their type of work. Later comes the thrilling reunion of Bruce with his original owner, and after that we follow the dog's training for his natural work, herding sheep on a farm.

In these books, children not only find thrilling examples of dog heroism and fine relationships between dogs and men but they also learn, incidentally, much about the training of dogs. Boys and girls from eight to eleven will enjoy and profit by this fine tale of Black Bruce.

KANGAROO TWINS. By Inez Hogan. New York: E. P. Dutton and Company, 1938. Unpaged. \$1.00.

Every nursery, kindergarten, primary child rejoices over every animal "Twin" book that Inez Hogan provides for them. *The Kangaroo Twins* is almost the best, or is that merely be-

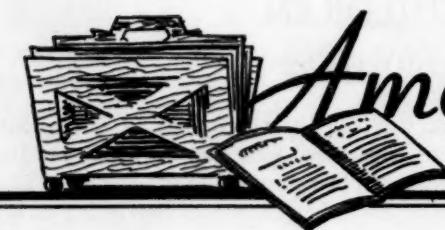
cause it is the latest? Anyway, it is excellent. There is the usual little plot of sinning, getting into danger, being saved and repenting, but Miss Hogan makes her pattern as convincing as it is satisfying. Moreover, the Australian setting permits the addition of such beguiling creatures as the koala bear, dingos, monkeys and the kangaroos themselves. Miss Hogan's sepia studies of these animals are unbelievably expressive. The ladies of the herd, ohing and ahing over the kangaroo twins, are a treat, but so are all the pictures. In short, do not miss the *Kangaroo Twins*.

SING FOR YOUR SUPPER. Eleanor Farjeon. Illustrated by Isobel and John Morton Sale. New York: Frederick A. Stokes Company, 1938. Pp. 137. \$1.50.

Little Tommy Tucker may "sing for his supper" but Eleanor Farjeon sings for children and they sing with her, delightedly. Probably as many children chant and chuckle over "A Lady in a Tower" and "Hannibal" as any two poems you can think of at random. Now, verse choirs in elementary schools will soon be saying, from this last little volume, "Nine Red Horsemen," "News, News," "Bethlehem Bells" and many others. *Sing for Your Supper* is a gay and valuable little book of poems.

THE PIG THAT DANCED A JIG. Story by Katherine Morse. Pictures by Winifred Bromhall. New York: E. P. Dutton and Company, 1938. Pp. 16. \$1.00.

Patrick was a fine young pig altogether. He was the politest pig in all Ballymara and he adored his young mistress Moira. When Moira blew on her pipe, Patrick would rise on his hind legs and jig; so Moira had every reason to be proud of her pet. Then, the fickle girl transferred her devotions to a stupid doll and poor Patrick, shedding tears of bitterness, ran away from home. Of course, he returned eventually and Moira took him to her heart again and "happiness reigned in the little white house with the thatched roof in the village of Ballymara in County Kilkenny, in the green land of Ireland." For children four to seven.



Among... THE MAGAZINES

OVERCOMING FEAR. By Catherine L. Jersild.

Parent's Magazine, December, 1938, 13:22, 55-57.

The fears which terrify and sometimes do serious things to plastic, growing personalities are frequently not recognized by parents (and teachers). It is imperative that we study them seriously, first through the many books, research findings, and magazine articles which now make our ignorance unforgivable and, second, through careful observation of each individual for whom we teachers are responsible. The good that enlightened kindergarten teachers could do in helping children overcome their fears takes one's breath away.

Mrs. Jersild's article will be of great help to all parents and teachers. It is hoped that many will discover it.

EMERGING EMPHASES AS TO LEARNING.

By L. Thomas Hopkins. *Teachers College Record*, November, 1938, 40:119-128.

Critical examination of the factors which govern learning is much needed by teachers. There are newer conceptions which "offer possibilities of shaping elementary education more intelligently in the future." The atomistic conception of life and learning is rejected and the organicistic conception of life and living is used as the basis for this reshaping. "Life is the continuous interaction of the organism with the culture in which that organism lives and grows. . . . The simplest definition of a good learning situation, then, represents an individual facing realistically his own situation."

The school must exist for the purpose of aiding children to manage their lives more intelligently. . . . The schools must, therefore, reshape their conceptions of learning, without which their function in a democracy must remain unachieved in the future as it has in the past.

FALSE PROGRESSIVES. By Abraham Minkus.

Educational Method, November, 1938, 18: 69-74.

"Follow-the-winders" is a new and apt way to designate those who pretend to be up to the minute. "They attempt to make the old formal education, with slight modifications, pass for progressive informality by applying the very phrases they have learned by rote, with magical mental acrobatics, to the old discipline, memorization, copying, dull repetition, weak generalization, teacher assignment, and textual procedure."

The author describes a lesson procedure, occurring daily in too many schools, called social studies which "actually comes closer to being a good formal reading lesson. The false progressives . . . are tossing overboard two fundamental principles of the Dewey philosophy—that the growth of the child supercedes the demands of subject matter, and that interest and effort are running mates. . . . Thus, a good half of progressive education is discarded."

METHOD OF TEACHING READING TO MENTALLY RETARDED CHILDREN. By Nedra Hawk. *The Training School Bulletin*, November, 1938, 35:137-143.

The wisdom of this article could well be applied to a large majority of all children. "All too frequently the formal teaching of reading is begun before the . . . child has reached an adequate mental age. As a result, he often develops an antagonistic mind set against reading. To compensate for his inability to read, he finds satisfaction in being the class bully, the teacher's or parent's problem child, and grows behaviorally more unstable every day. . . . It is a tremendous strain on the nervous system to struggle day after day to attain a goal beyond the limits of one's abilities."



Editor, JOHN A. HOCKETT

Research... ABSTRACTS

APPRAISAL OF NEWER ELEMENTARY SCHOOL PRACTICES. By J. Wayne Wrightstone. New York: Teachers College, Columbia University, 1938. Pp. iii+221.

Evidence of progress in ability to evaluate educational outcomes hitherto considered too intangible for measurement is presented in this recent endeavor to compare the achievements of traditional and newer or progressive elementary schools. The investigator accepted the formulation of objectives stated in the New York State booklet, *Cardinal Objectives in Elementary Education*, published in 1931. This report holds that the major objectives of the elementary school are to help every child: (1) to understand and practice desirable social relationships; (2) to discover and develop his own individual aptitudes; (3) to cultivate the habit of critical thinking; (4) to appreciate and desire worthwhile activities; (5) to gain command of common integrating knowledges and skills; and (6) to develop a sound body and normal mental attitudes.

He then selects or devises measuring instruments to evaluate the relative effectiveness of traditional and progressive schools in achieving each of these objectives. Evaluation of the first objective involves a specially constructed information test, a specially constructed test on beliefs and attitudes, a test of honesty in scoring one's own papers, and the use of controlled observation and anecdotal record techniques to secure evidence of initiative, cooperation, leadership, and work spirit. From one to seven specific measures are used in evaluating each of the other five objectives.

Pupils in the experimental schools rated higher on practically every one of the tests, although the differences in several cases were small. Superiority of the progressive school pupils was especially marked in both the quantitative and qualitative evaluation of self-initiated

activities, critical activities, experimental, and leadership activities. These pupils were also strikingly superior in their participation in several extra-classroom activities. Their achievement in the three R's was above that of the conventional school pupils, particularly in the primary grades and in language throughout the elementary school. The progressive school pupils were found superior in physical fitness and in personal and social adjustment.

It should be stated that the experimenter took great care in equating the two groups whose achievements were compared. He presents comparative data on intelligence, chronological age, socio-economic status, teaching conditions, and other relevant factors. He also presents descriptions of the types of procedures and educational assumptions characteristic of the two types of schools, with illustrations of actual teaching procedures. It might also be added that his findings are in general agreement with previous studies in which the outcomes of the older and newer types of schools have been compared.

THE EFFECT OF PRAISE AND COMPETITION ON THE PERSISTING BEHAVIOR OF KINDERGARTEN CHILDREN. By Theta Holmes Wolf. Minneapolis: The University of Minnesota Press, Child Welfare Monograph Series, No. 15, 1938. Pp. v+138.

The author states that this investigation was frankly exploratory, designed to determine the direction of influence of a varying number of conditions. Twenty kindergarten children, whose median age was five years, five months, and whose average I.Q. was 114 for the girls and 116 for the boys, were the subjects of the experiment. Five different tasks were devised and each child was given each task three times with a modification of the incentive in each case.

One task was designed to present a difficult

problem-solving construction situation in which the child could easily see his own progress. This task involved the construction of a Tinker Toy model of a windmill like one set up before the child. In the other two trials, the models were a steam shovel and a derrick. The second type of task was designed to require large-muscle motor skill in which success would be limited but apparent. A game was designed in which the child attempted to throw jar-rubber quoits onto a small moving merry-go-round containing four wooden animals with a metal rod projecting from the back of each animal. The third task, which required a finely coordinated skill with no definite set goal, consisted in placing pins in a pegboard with a pair of tweezers. It was desired that the fourth task be an automatic one, having little intrinsic appeal although giving evidence of progress. For this task a cancellation game was used, in which the child was expected to cancel all figures of dolls from mimeographed sheets containing kites, rabbits, fish, leaves, and dolls. The fifth task consisted in dropping small lead balls into a box through a small hole, an automatic task, comparatively unappealing, with no visual evidence as to progress.

Various precautions were taken to eliminate the influence of competing attractions and to avoid taking the child from some activity to which he would wish to return as soon as possible. The experimenter introduced each child to his task in such a way that she was certain he understood what was expected. In one series of trials, she then withdrew behind a one-way vision screen to proceed with her work, telling the child he could stop as soon as he wished or continue as long as he liked. In the series of trials stressing praise, she remained with the child and at frequent intervals definitely encouraged his activity. In the competitive series, four children were brought from the kindergarten at one time and participated in the activity simultaneously. The children were told that the one who worked the longest and hardest would have his name at the top of a card with a large

number of stars after it but that the one who did the least would have his name at the very bottom. The materials and motivations were rotated for each individual so that the influence of position in the series could be eliminated. The experimenter kept the persisting time of each child in each situation with a stop-watch.

In four of the five tasks the competitive situation led to the most persisting behavior, the mean number of minutes for the five tasks being 17.2. Behavior persisted second longest when praise was employed, the mean time being 10.9 minutes. In the no-incentive situation the mean time was 7.2 minutes. The children soon tired of tossing rings on the merry-go-round animals when neither competition nor praise was employed, but they persisted much longer with the Tinker Toy and with placing pins in the pegboard, both of which activities required fine motor skill. Praise was considerably more effective, however, with the merry-go-round task than the others. Competition showed a greater relative influence upon the ring-tossing activity and also affected the repetitive tasks of cancelling dolls and dropping balls more than it did the skilful task of the pegboard. Persisting behavior with the Tinker Toy seemed to depend more upon the individual's level of aspiration in achieving goals, his general level of self-confidence in problem-solving situations, and certain other social experiences, than upon the specific incentives employed in the experiment.

Little help in understanding individual differences in persistence scores was given by examination of such factors as sex, socio-economic status, age, and intelligence. The author states that a generally high level of persisting behavior depends in part upon a level of performance demanded or expected by adults which is properly adjusted to the child's ability. If the adults expect more than the child can accomplish or less than he is able to do, he tends to put forth little effort or develops a state of tension which leads to restless behavior.



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MARY E. LEEPER



News . . . HERE AND THERE

NEW A.C.E. BRANCHES

Jackson County Association for Childhood Education, Alabama
San Francisco Alumnae of Delta Phi Upsilon, California
Clinch County Association for Childhood Education, Georgia
Columbus-Muscogee Association for Childhood Education, Georgia
Waycross Association for Childhood Education, Georgia
Pittsburg Association for Childhood Education, Kansas
Association for Childhood Education of State Teachers College, Buffalo, New York
Pinehurst-Southern Pines Association for Childhood Education, Pinehurst, North Carolina
Winston-Salem Association for Childhood Education, North Carolina
Duquesne University Association for Childhood Education, Pittsburgh, Pennsylvania
Capital City Association for Childhood Education, Pierre, South Dakota
Rapid City Association for Childhood Education, South Dakota
Linden Association for Childhood Education, Tennessee
Tipton County Association for Childhood Education, Tennessee
Smith County Association for Childhood Education, Texas
Norfolk Association for Childhood Education, Virginia

NATIONAL COUNCIL OF CHILDHOOD EDUCATION

The National Council of Childhood Education, in which the participating groups are the National Association for Nursery Education and the Association for Childhood Education, will meet at Cleveland, Ohio, on Monday, February 27, during the conference of the American Association of School Administrators. The theme will be "Coordination of Community Agencies for Child Welfare." In the morning, George D. Stoddard, University of Iowa, will discuss the functions of the Council and in the afternoon reports of community agencies at work will

be given by H. G. Otto, Kellogg Foundation, Battle Creek, Michigan; Agnes B. Snyder, New College, Teachers College, Columbia University; and others. At a buffet luncheon those particularly interested in the field of childhood education will have an opportunity to meet and talk with friends.

On Tuesday afternoon the Council is invited to meet with the Department of Elementary School Principals, when Emmett M. Betts and Claire T. Zyve will lead the discussions. On Wednesday morning Council members will meet with the Department of Supervisors and Directors of Instruction to hear Willard C. Olson point out some of the implications of research in growth and development of the child.

BULLETIN REVISED

Because new materials are constantly appearing and some old materials listed in other editions are no longer available, the Committee on Equipment and Supplies, Frances M. Berry, chairman, has revised the 1937 bulletin, *Equipment and Supplies*. Two new features increase the usefulness of this third edition—the alphabetical index of materials in the classified lists, and the advertising section, where some manufacturers of approved and listed products give detailed descriptions and illustrations of their materials. The bulletin will be ready for distribution February 1. Price 50c.

A.C.E. PIN

If you are a contributing member of the A.C.E. (one who pays \$1.00 each year directly to Headquarters in Washington), or a member of an A.C.E. Branch, you are entitled to wear the official pin. It is blue enamel with letters and fluted edge in gold. Order from A.C.E. Headquarters, 1201 Sixteenth St. N.W., Washington, D.C. Rolled gold, \$1.00; 10-K gold, \$4.00.

CRYSTAL SYMPHONY

Those who attended the banquet at the A.C.E. convention in Cincinnati last year will remember the Crystal Symphony and what fun it was to tap out melodies with tiny wooden mallets on glasses filled to different levels with water. The director, Mr. Ray Kratz, has been experimenting with a similar performance using cowbells, painstakingly pitched and tuned and sounded by strokes with rubber-muted clappers. Mr. Kratz will send information and instructions to anyone who addresses him at Hughes High School, Cincinnati, Ohio.

FROM CZECHOSLOVAKIA

In a letter from a reader of *Childhood Education*, a kindergarten teacher in Czechoslovakia, comes this statement of courage:

"A great part of our country has been ceded to Greater Germany and Poland. We have lost more than one thousand kindergartens and very many kindergarten teachers have lost their employment, but we are all working very hard to settle the conditions for new work and are sure to succeed again."

EDUCATIONAL POLICIES COMMISSION

The Educational Policies Commission is now completing the third year of the five-year period during which its financial support is assured. At its meeting in Chicago in November 1938, the Commission considered the work now in hand and plans for the future. Attention was given to three related phases of the Commission's mandate: (1) the definition of critical issues in American education, (2) the development of pronouncements of policy concerning these issues, and (3) the promotion and implementation of these pronouncements.

Regarding its future program three decisions were reached: (1) to complete as rapidly as possible the pronouncements already under way;

(2) to focus all efforts on getting the recommendations of the Commission before the American people; and (3) to emphasize the need for a vitalized and coordinated program of civic education for children and adults.

PUBLISHERS' REQUEST

Publishers urge teachers to mention their positions when writing to textbook publishing companies. This information is always required by reliable companies before keys and manuals may be mailed to anyone, and is a definite aid to intelligent handling of orders. Even though you have previously given the information, mentioning it *every time* will avoid delay.

FRIENDSHIP PACKETS

The National Literature Department of the Women's International League for Peace and Freedom has prepared a series of Friendship Packets designed for use in elementary grades in the public schools. The material consists of a picture to color, a story for early readers, a simple play, poster, travel folder, and suggestions for children's supplementary reading. A postcard request to the League at 1924 Chestnut Street, Philadelphia, Pennsylvania, will bring a publication list and other material.

FILM ON CHILDREN'S MUSEUMS

"The Child Explores His World" is the topic of a film for adult audiences which has for its purpose the encouragement of organizations and communities to create museums for children. It shows the "museum way" of acquainting boys and girls in cities and towns with the world that lies outside their experience. First shown to the Children's Museum Section of the American Association of Museums Conference in Philadelphia last May, the film has now been released for general circulation by the Harmon Foundation, 140 Nassau St., New York City.

C. Geraldine O'Grady

MISS O'GRADY, who died October 19, 1938, in a nursing home at Stratford, Ontario, Canada, was widely known in teaching circles throughout the United States. She was a kindergarten teacher in the Philadelphia Normal College and in Teachers College, Columbia University,

sity, and later served as supervisor of kindergartens in Brooklyn, New York, until ill health forced her retirement. Miss O'Grady was devoted to her profession, and in addition to her work as a teacher edited several books for children, which were well received.

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